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Via Electronic and US Mail

November 19, 2018

Joseph A. Gowers
Remedial Project Manager
Emergency and Remedial Response Division
USEPA Region II
290 Broadway, 19th Floor
New York, New York 10007-1866

Re: Ringwood Mines/Landfill Superfund Site
2018 Annual Groundwater, Mine Water, and Surface Water Sampling

Dear Mr. Gowers:

Cornerstone Engineering Group, LLC, on behalf of Ford Motor Company (Ford), completed the 2018 Annual Sampling Event for groundwater, mine water, and surface water at the above referenced Site, which includes sampling within all three Land Areas of Concern (AC), the Peter's Mine Pit (PMP) Area, the O'Connor Disposal Area (OCDA) and the Cannon Mine Pit (CMP) Area. The work was completed in accordance with a Work Plan dated August 1, 2017, and as modified by an electronic mail approval from USEPA, dated June 20, 2018, to eliminate analysis for semi-volatile organic compounds (SVOCs), with the exception of 1,4-dioxane, and polychlorinated biphenyls (PCBs) in surface water samples. Analysis of these compounds in surface water was eliminated based on previous sampling results that have consistently demonstrated that these constituents are non-detect and therefore continued analysis for these parameters provides no useful information.

A synoptic round of water levels at all accessible monitoring wells was completed on August 20, 2018 prior to the initiation of groundwater sampling. The sampling was performed during the period August 21 through August 31, 2018, with resampling of eight locations (All four depths of the Cannon Mine Shaft, wells OB-20B, RW-6, RW-6A and SC-01) for VOCs only on September 5, 2018 due to the presence of air bubbles in the VOC vials associated with the original samples.

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Sampling Locations

Sampling was performed at groundwater monitoring wells, mine structures, and surface water locations as shown in the tables below. Overburden Groundwater Monitoring Wells:

OB-10	OB-17	OB-22	OB-29	OB-33
OB-11R	OB-18	OB-23	OB-30A	
OB-14A	OB-19	OB-24	OB-30B	
OB-14B	OB-20A	OB-25	OB-30C	
OB-15B	OB-20B	OB-27	OB-31	
OB-16	OB-21	OB-28	OB-32	

Bedrock Groundwater Monitoring Wells:

OB-2	RW-3DS(155-160)	RW-8(204-214)	RW-13(71-91)
OB-3	RW-3DD(175-180)	RW-9A(25-35)*	RW-13(100-120)
OB-4	RW-4A(62-72)	RW-9A(85-95)	RW-13(150-170)
OB-5	RW-4A(113-123)	RW-9(139-149)*	RW-14S(135-155)
OB-6	RW-4(333-343)	RW-9(206-216)	RW-14D(175-185)
OB-7	RW-4(393-403)	RW-10A(51-61)*	RW-15S(110-120)
OB-12	RW-5A	RW-10A(75-85)	RW-15D(127-137)
OB-13	RW-5	RW-10(120-130)	RW-16
SC-1	RW-6A	RW-10(185-195)	
SC-2	RW-6	RW-11(236-241)	
RW-2(279-289)	RW-7	RW-11(262-267)	
RW-2(452-462)	RW-8A(47-57)*	RW-12(55-65)	
RW-3(77-87)	RW-8(163-173)	RW-12(130-140)	

*Indicates well was dry or produced insufficient volume at time of sampling therefore a sample could not be collected during this event.

Surface Water Sampling Locations:

SR 3-Seep-2	SW-3	SW-PAB-01A	PMP Pond
SR 3 Pond	SW-4	SW-PAB-01	SW-PAB-00
SR 3-Seep-1	SW-MRB-03	SW-SP-01	SW-NOB-01
SW-NOB -02	SW-MRB-02	SW-PAB-03	SW-PMB-01
SW-PAB -04	SW-MRB-01	SW-PAB-02	
SW-PMB - 02	SW-MRB-00	SW-11	
Additional Surface Water Locations – Since August 2017			
RC-01	RC-02	RC-03	RM-01

SP-00	PMB-01A	PMB-02A	PAB-03A
SW-17			

Mine Structure Sampling Locations:

PM Air Shaft-50	PM Air Shaft-230	CM Shaft-100	CM Shaft-275
PM Air Shaft-180	CM Shaft-50	CM Shaft-160	

PM – Peters Mine
CM – Cannon Mine

Groundwater monitoring well, mine structure, and surface water sampling locations are illustrated on Figure 1 (see Attachment A, Figures). In addition, groundwater monitoring well construction details are provided in Table 1 and water level measurements are provided in Table 2.

Sample Collection and Analyses

Groundwater samples were collected using the low-flow sampling methodology, consistent with previously approved and implemented practices, and field sampling data sheets are attached for reference (see Attachment B). As documented during previous sampling events, several of the bedrock wells exhibit poor recharge resulting in very low purge rates and, in some cases, inadequate volume for the collection of the full suite of parameters. To maximize sample volume, optimized purge rates established during prior sampling events were used. Also, per approval from USEPA, some locations required the collection of samples over a 24-hour period for collection of sufficient volume, and/or the volume collected was dedicated to a prioritized list of analytes. Details regarding purge rates, sampling times, and the locations at which inadequate sample volume prohibited the analysis for the full suite of parameters (and, in this event, which parameters were analyzed) are provided in Table 3. Field data sheets are provided in Attachment B.

Groundwater, mine water and surface water samples were sent under chain of custody to Test America Laboratories for analysis of Target Analyte List (TAL) inorganic compounds, Target Compound List (TCL) organic compounds (plus tentatively identified compounds (TICs) and wet chemistry. Samples were not analyzed for pesticides based on prior approval from the USEPA dated April 2, 2007. In addition, as previously stated, as approved by USEPA by electronic mail dated June 20, 2018, surface water samples were not analyzed for PCBs or SVOCs, with the exception of 1,4-dioxane, which was included and analyzed. With the exception of the elimination of analysis for SVOCs and PCBs in surface water, the above list of analyses is consistent with the analytical work scope during prior annual sampling events.

Samples were analyzed using the following methodology:

- Volatile Organics + 15 TICs – USEPA Method 8260B
- Semi-Volatile Organics + 15 TICs – USEPA Method 8270C
- 1,4-dioxane - USEPA Method 8270D SIM with Isotope Dilution
- Metals (total and dissolved)– USEPA Methods 6020A/7470A
- Total Cyanide - USEPA Method 9012B
- PCBs – USEPA Methods 8082
- Alkalinity, total (as CaCO3) – USEPA Method SM20 2320B
- Chloride – USEPA Methods 300/9056
- Sulfate – USEPA Methods 300/9056

Samples were analyzed for the full suite of parameters above unless otherwise noted in Table 3, and as described above relating to inadequate sample volume.

Cadena, Inc. conducted a level 2 validation of the laboratory analytical results for the sample delivery groups (SDGs) generated by Test America during this sampling event. A copy of the laboratory and data validation reports is provided in Attachments C and D, respectively.

Groundwater Elevation Data

Prior to sampling, a synoptic round of water levels at the groundwater monitoring wells was conducted on August 20, 2018. Groundwater elevation data from this round of water level measurements are presented on Figures 2 through 6 (Attachment A, Figures). These figures present groundwater contours as follows:

- Figure 2 – PMP Area overburden groundwater
- Figure 3 – PMP Area shallow bedrock groundwater
- Figure 4 –OCDA overburden groundwater
- Figure 5 – CMP Area shallow bedrock groundwater
- Figure 6 – CMP Area deep bedrock groundwater

As shown in Figures 2 and 4, the groundwater flow gradient in the overburden is generally to the south-southeast from the PMP Area towards the OCDA. As shown in Figure 3, the groundwater flow gradient in the shallow bedrock in the PMP Area is generally to the southeast. The groundwater flow gradient in the shallow and deep bedrock in the CMP Area is primarily from the bedrock ridge towards the southeast with a component of flow to the southwest as shown in Figures 5 and 6. The flow gradients in each of the three land ACs is consistent with the findings of the Site-Related Groundwater Remedial Investigation (RI) as outlined in the RI Report dated January 2015.

Analytical Data

The results of the 2018 Annual Sampling Event are summarized in the tables identified below. Analytical data are organized by providing summary tables of detected parameters (i.e., only those locations and parameters for which there were detected constituents), followed by tabulation of the complete data sets (i.e., all locations and parameters). Note that Tables 13A and 13B summarize the current and historic (2004-2018) benzene, 1,4-dioxane, chloroethane, arsenic, and lead concentrations in both groundwater and mine structures, respectively. These tables are provided for consistency with Table 13 from the Site-Related Groundwater RI Report dated January 2015 for ease of comparison of historical and current data for these parameters. Last, the data have been organized by Land AC - PMP Area, OCDA, CMP Area, Sally's Pond Area, surface water, mine structures, and quality control data.

More specifically, the full suite of tables prepared to summarize the data and following this letter report include:

Table 1 – Monitoring Well Construction Details
Table 2 – Site Wide Water Level Measurements – August 20, 2018
Table 3 – Bedrock Well Purge Rates, Volumes and Sample Collection
Tables 4A – 4G – Field Data Summary Tables
Tables 5A – 5F - Peters Mine Pit (PMP) Area Groundwater Data
Tables 6A - 6E – O'Connor Disposal Area (OCDA) – Groundwater Data
Tables 7A – 7F - Cannon Mine Pit (CMP) Area – Groundwater Data
Tables 8A – 8E – Sally's Pond Area (SPA) – Groundwater Data
Tables 9A - 9E – PMP and CMP Air/Mine Shafts – Mine Water Data
Tables 10A – 10D – Surface Water Data -
Tables 11A – 11D – Groundwater/Surface Water Quality Control Sample Data
Table 12 - Data Validation Qualifiers
Tables 13A -13B - Summary of Historical and Current Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead.

Results Summary

The results of the 2019 Annual Sampling Event are summarized in the sections that follow organized by Land AC, Sally's Pond Area, surface water, mine structures, and quality control data.

Peters Mine Pit Area - Groundwater

- The only volatile organic compound (VOC) reported above its respective New Jersey Groundwater Quality Standard (NJGWQS) is benzene and the only VOC detected above its New Jersey Interim Generic Groundwater Quality Criterion (NJIGGWQC)

is chloroethane (See Table 5A). Benzene and chloroethane were reported at generally low levels consistent with historical concentrations.

- VOC TICs were also reported at various well locations at low levels, all "J" qualified (i.e., estimated values), and similar to historical concentrations.
- To facilitate review of the organic compound data, Figures 7 and 8 (see Attachment A) present the benzene and 1,4-dioxane data (discussed below) superimposed on the overburden and shallow bedrock groundwater contour maps.
- As a point of reference for chloroethane, the USEPA Regional Screening Level for tap water for this compound is 21,000 micrograms per liter (ug/L) compared to the NJIGGWQC of 5 ug/L. The highest reported concentration for chloroethane during this sampling round was 180 ug/L at OB-27. Therefore, chloroethane concentrations were not added to the figures to help maintain clarity.

- With the exception of 1,4-dioxane and hexachlorobenzene (See Table 5B), semi-volatile organic compounds (SVOCs) were detected only sporadically, at low levels, and none were detected above NJGWQS.

  - SVOC TICs were also reported sporadically at low, "J" qualified levels, and similar to historical concentrations (See Table 5B).
  - 1,4-dioxane was reported above its NJGWQS of 0.4 ug/L in 16 samples as shown in Table 5B and as illustrated on Figures 7 and 8. The recent sampling results are consistent with historical data with most, but not all, of the reported concentrations generally low at less than 10 ug/L. The results for six locations are qualified with a "B" indicating that 1,4-dioxane was also detected in the field blank associated with these samples (see discussion under Quality Control Samples).
  - While the 1,4-dioxane results remain generally consistent with historical values, the August 2018 results may be biased high due to detectable concentration in the field blank. Those locations with higher concentrations (e.g., RW-3, RW-3DS, RW-3DD, RW-11) were identified during prior sampling events and the results during this sampling event are also consistent with historical results.
  - Hexachlorobenzene concentrations (0.027, 0.027 and 0.034 ppb) at three locations (one overburden, two bedrock) were marginally above its NJGWQS of 0.02 ppb. However, these data are qualified with an "*" indicating that the Relative Percent Difference (RPD) of the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) exceeds the control limits. This indicates that the results are biased high. Since the reported concentrations

only marginally exceed the NJGWQS, the true concentration may not exceed the NJGWQS.

- No PCBs were detected in any of the groundwater samples (see Table 5F).

- Analyses were performed for both total (unfiltered) and dissolved (filtered) metals. The only metals reported above their respective NJGWQS are aluminum, arsenic, iron, manganese, sodium and one instance of total lead (not dissolved). The results for these metals are shown in Table 5C and summarized as follows:

    - Aluminum was reported above its NJGWQS in several bedrock and overburden wells and in total and filtered samples, with fewer detections in filtered samples. Aluminum is naturally occurring and an abundant secondary metal in the soil/groundwater system at the Site.
    - Total arsenic was reported above its 3 ug/L NJGWQS in 11 samples and dissolved arsenic was reported above the NJGWQS in 10 of those samples at levels consistent with historical data and typically at well locations where groundwater exhibited reducing geochemical conditions.
    - Iron and manganese were reported above their respective NJGWQS in a number of samples, in both the total and dissolved (filtered samples) forms. Iron and manganese are naturally occurring secondary metals that are prevalent in the overburden and bedrock aquifers at this former iron mine Site.
    - Sodium, a commonly occurring secondary metal, was reported above its NJGWQS in both total and dissolved forms in eight samples.

- As shown in Table 5C, of the wet chemistry parameters, sulfate was reported above its NJGWQS in one sample. Sulfate is naturally occurring and a common analyte in natural groundwater systems.

O'Connor Disposal Area - Groundwater

- There were no VOCs reported above their respective NJGWQS and the only VOC TIC reported was a low "J" qualified concentration of indane (See Table 6A).

- As shown in Table 6A, hexachlorobenzene, was reported marginally above its NJGWQS (0.03 ppb as compared to the NJGWQS of 0.02 ppb) at well OB-18, however, this constituent was not detected in the duplicate sample (OB-18 DUP).

- As also shown in Table 6A and Figure 9, 1,4-dioxane was reported above its 0.4 ug/L NJGWQS at one location, well OB-17, at a concentration that is comparable to prior sampling events. The data at and around well OB-17 continue to indicate that this is

a localized occurrence given the absence of 1,4-dioxane, other than a trace concentration at well OB-14, B elsewhere in the OCDA.

- As shown in Table 6A, PCBs were not detected in any of the OCDA groundwater samples.

- Analyses were performed for both total (unfiltered) and dissolved (filtered) metals. The only metals reported above their respective NJGWQS are aluminum, arsenic, iron, manganese and sodium (See Table 6B). The results for these metals are summarized as follows:

    - Total aluminum was reported above its NJGWQS in two samples. All dissolved aluminum results were below the NJGWQS for this naturally occurring secondary metal.
    - Total arsenic was reported above its 3 ug/L NJGWQS in one sample. Dissolved arsenic was not detected above the NJGWQS in any of the groundwater samples indicating that the total arsenic concentration is associated with particulates in the groundwater samples.
    - Iron and manganese were reported above their respective NJGWQS in a number of samples, in both total and dissolved form, with most of the exceedances being total iron or manganese indicating that the reported concentration are reflective of elevated particulates in the groundwater samples. Iron and manganese are naturally occurring secondary metals that are prevalent in both the overburden and bedrock aquifers at this former iron mine Site.
    - Sodium, a commonly occurring secondary metal, was reported above its NJGWQS at one well location in both total and dissolved forms.
    - As also shown in Table 6B, none of the wet chemistry parameters were detected at concentrations above their respective NJGWQS.

Cannon Mine Pit Area – Groundwater

- As shown in Table 7A and Figures 10 and 11, VOCs are reported sporadically, and with the exception of acetone, which is a common laboratory artifact, typically at low "J" qualified concentrations. Benzene was reported above its 1 ug/L NJGWQS at two well locations at concentrations of 1.4 and 2.8 ug/L and VOC TICs were reported at three well locations at low, "J" qualified concentrations.

- As shown in Table 7B, SVOCs and SVOC TICs are reported only sporadically, at low, typically "J" qualified levels, with no compounds reported above NJGWQS except for 1,4-dioxane at three well locations and benzo(a)anthracene at one well location. As also shown in Table 7B and Figures 10 and 11, 1,4-dioxane was reported above the NJGWQS of 0.4 ug/L in three samples collected at depth from bedrock wells RW-2(279-289), RW-2(452-462) and RW-8 (206-216). These results are generally consistent with historical groundwater quality data, although this is the first time that 1,4-dioxane was reported marginally above its 0.4 ug/L NJGWQS at RW-8(206-216) at a concentration of 0.44 ug/L.

- As also shown in Table 7B, PCBs were not detected in any of the samples.

- Analyses were performed for both total (unfiltered) and dissolved (filtered) metals. The only metals reported above their respective NJGWQS are aluminum, arsenic, iron, manganese, and sodium (See Table 7C). The results for these metals are summarized as follows:

    - Aluminum (total) was detected in two samples above its NJGWQS. The dissolved results were below the standard, indicating that the total results are associated with particulates in the groundwater samples.

    - Arsenic was reported above its 3 ug/L NJGWQS at three bedrock well locations in both the total and dissolved forms and at one location in its total form only. The one location (RW-2-279-289) at which total arsenic was reported at 7.1 ug/L is higher than historical values, however, the dissolved concentration (1.2J ug/L) is consistent with historical concentrations as are the other results. Arsenic is naturally occurring and prevalent within the bedrock formations and mine tailings at the Site.

    - Iron and manganese were reported above their respective NJGWQS in a number of samples, in both total and dissolved form, with most of the exceedances being total iron or manganese indicating that the reported concentration are reflective of elevated particulates in the groundwater samples. Iron and manganese are naturally occurring secondary metals that are prevalent in both the overburden and bedrock aquifers at this former iron mine Site.

    - Sodium, a commonly occurring secondary metal, was reported above the NJGWQS in six groundwater samples, both in the total and dissolved forms.

- As shown in Table 7C, of the wet chemistry parameters, chloride and sodium were each reported in two samples above their respective NJGWQS.

Sally's Pond Area – Groundwater

- As shown in Table 8A, there were no VOCs or SVOCs reported above their respective NJGWQS in any of the four groundwater sampling locations; wells OB-10, OB-29, RW-12 (55-65) and RW-12 (130-140). One VOC and three SVOC TICs were reported sporadically and at low, "J" qualified concentrations.

- As also shown in Table 8D, 1,4-dioxane was not detected in any of the four Sally's Pond Area groundwater samples.

- As also shown in Table 8A, PCBs were not detected above NJGWQS in any of the samples.

- Analyses were performed for both total (unfiltered) and dissolved (filtered) metals. The only metals detected above their respective NJGWQS are aluminum, arsenic, iron, and sodium (See Table 8B). The results for these metals are summarized as follows:

    - Total aluminum was reported above its NJGWQS in two samples. All the dissolved results were below the NJGWQS again illustrating the effect of particulates in the groundwater samples.

    - Arsenic was reported above its NJGWQS in groundwater at two well locations in both the total and filtered samples. Arsenic is also naturally occurring and prevalent within the bedrock formations and mine tailings at the Site.

    - Total iron was reported above its NJGWQS in groundwater at two well locations. Iron is naturally occurring and prevalent in both the overburden and bedrock aquifers at this former min Site.

    - Sodium, a commonly occurring secondary metal, was reported above its NJGWQS in groundwater at one well location, in the total and filtered samples.

- As also shown in Table 8B, of the wet chemistry parameters, sulfate was reported in one sample above its respective NJGWQS.

Overall, the collective August 2018 groundwater analytical results are consistent with historical data, and continue to demonstrate only sporadic, low-level, and localized site-related constituents and various inorganics in groundwater that are also naturally occurring in the aquifer systems at the Site. 1,4-dioxane was reported sporadically in overburden groundwater at generally low levels, and at somewhat higher levels in the mine water at the

base of the PMP Air Shaft and at several adjacent and downgradient PMP Area bedrock well locations, with the distribution generally consistent with the results of prior sampling events.

Mine Water

- Seven samples of mine water were collected for analyses; three different depth intervals in the PMP Air Shaft (50, 180, and 230 feet) and four different depth intervals in the CMP Mine Shaft (50, 100, 160, and 275 ft).

- As shown in Table 9A, the only VOC reported in mine water above its NJGWQS is benzene in the PMP Air Shaft at the 180′ and 230′ depth intervals at concentrations consistent with historical results. In addition, chloroethane was reported above its NJIGGWQC in the same two depth intervals at concentrations that are also consistent with historical results. VOC TICs were also reported within the 180′ and 230′ depth intervals in the PMP Air shaft at low levels, mostly "J" qualified, which is also similar to historical results.

- 1,4-dioxane was reported above its NJGWQS at the PMP Air Shaft 50′, 180′ and 230′ depth intervals at concentrations that are comparable to historical results. The result from the 50-foot interval at 0.41 ug/L is flagged with a "B" because 1,4-dioxane was found in the field blank on the day this sample was collected at a concentration of 0.26 ug/L. The data therefore indicate that the result reported in the 50′ depth interval sample may be biased high.

- Also consistent with historical data, 1,4-dioxane was reported at trace concentrations below its 0.4 ug/L NJGWQS in the CMP Shaft at the 50, 100, 160 and 275 ft. depth intervals. These results are also flagged with a "B" because 1,4-dioxane was found in the field blank on the day these samples were collected at a concentration of 0.26 ug/L. The data therefore indicate that these results may be biased high.

- No other SVOCs were reported above NJGWQS in the PMP Air Shaft or CMP Shaft mine water. SVOC TICs were reported sporadically at "J" qualified values in two out of the seven mine water samples.

- As also shown in Table 9A, PCBs were not reported in any of the PMP Air Shaft or CMP Shaft mine water samples.

- Analyses were performed for both total (unfiltered) and dissolved (filtered) metals. The metals reported above their respective NJGWQS are arsenic, iron, manganese, lead, sodium and zinc (See Table 9B). The results for these metals are summarized as follows:

- Total arsenic was reported above its NJGWQS in the PMP Air Shaft 230-foot interval. However, all dissolved arsenic results were below the 3 ug/L NJGWQS.

- Total iron was reported above its NJGWQS in all the mine water samples which is to be expected at this former iron mine Site. Dissolved iron was reported above its NJGWQS in the majority of samples where mine water is more reducing but not at samples collected from the CMP shaft 50' and 275' interval and especially the PMP Air Shaft 50-foot interval where mine water is more oxidized, and iron would occur in particulate form.

- Manganese was reported above its NJGWQS in both total and dissolved forms in each sample except the PMP Air Shaft 50' depth interval sample. Iron and manganese are naturally occurring and prevalent in both the overburden and bedrock aquifers at this former iron mine Site.

- Lead was reported in the total form above its NJGWQS in two samples from the PMP Air Shaft. None of the dissolved lead concentrations were above the NJGWQS, indicating that the reported concentrations are associated with particulates in these samples.

- Sodium, a commonly occurring secondary metal, was reported above its NJGWQS in each of the CMP Shaft mine water samples.

- Total zinc was reported above its NJGWQS in the 160' and 275' depth intervals in the CMP Shaft samples and at the 180' depth interval in the PMP Air Shaft samples. Dissolved zinc concentrations were all below the NJGWQS indicating that the reported concentrations are attributable to particulates.

- As shown in Table 9B, no wet chemistry parameters were reported above their respective NJGWQS.

Surface Water

- Surface water sampling locations are shown in Figure 12. As previously stated, the 2018 annual monitoring event included the collection of samples from nine additional downstream surface water locations that were first included in the 2017 annual event and that were not typically monitored in the past.

- As summarized below, the samples from the additional surface water sampling locations indicate no VOC or SVOC concentrations above applicable New Jersey Surface Water Quality Standards (NJSWQS) and only sporadic total metals

concentrations above applicable inorganic SWQS which are attributable to particulates in the collected sample, as discussed further below.

- As shown in Table 10A and Figure 12, of the 27 surface water samples collected, the only VOC reported slightly above its NJSWQS is benzene in two samples (specifically, the SR-3 Seeps 1 and 2), and the values are both "J" qualified indicating trace estimated concentrations.

- Consistent with historic data, no VOC TICs were detected in any surface water sample.

- As shown in Table 10A and on Figure 12, low, single digit or lower (range of 0.4 to 1.6 ug/L), concentrations of 1,4-dioxane were reported in nine of the 27 surface water samples with concentrations declining from the immediate vicinity of the PMP Area to non-detect downstream of Sally's Pond.

- There is no NJSWQS for 1,4-dioxane therefore, for purposes of comparison, a surrogate screening value of 22,000 ug/L from the Michigan Department of Environmental Quality (MDEQ Rule 57 Water Quality Values) has been approved by USEPA for use as an Ecological Screening Benchmark (ESB) for the Site.

- 1,4-dioxane was not detected in any of the surface water locations that were added into the 2018 annual monitoring event which is consistent with the results from the 2017 sampling event at these same locations.

- While not directly applicable to surface water, the concentrations of 1,4-dioxane detected in the nine surface water samples in the PMP Area and immediately downstream are at or slightly above its NJGWQS of 0.4 ug/L.

- As shown in Table 10B, total arsenic was reported above its NJSWQS in one sample (SW-PAB-02). However, no dissolved arsenic concentrations were reported above NJSWQS indicating that the reported total arsenic concentrations are attributable to particulates in this water sample.

- As also shown in Table 10B, total lead was reported above its NJSWQS at two locations. Dissolved lead was not reported above NJSWQS again indicating that the reported total concentrations are attributable to particulates in these water samples.

- As shown in Table 10B, there were no wet chemistry parameters above their respective NJSWQS.

Overall, the collective surface water data are generally consistent with historic results and continue to demonstrate the absence of site-related constituents in locations downstream of Sally's Pond or downstream of the Site, as confirmed by the nine-additional downstream surface water locations that were sampled in 2017 and again during this 2018 Annual Sampling Event.

Quality Control Samples

Field and trip blanks were collected in accordance with the established protocols for quality assurance purposes. Tables 11A – 11D summarize the Groundwater/Surface Water Quality Control Sample Data and Table 12 summarizes the Data Validation Qualifiers. As shown in Tables 11A-11D, methylene chloride was detected in four field blanks and two trip blanks. and is a common laboratory contaminant. 1,4-dioxane was detected in one field blank collected on August 24, 2018 at a concentration of 0.26 ug/L suggesting some cross-contamination may have occurred with the sampling equipment on that date. This is the purpose of field blanks and, as noted in the water quality discussion above, the detection of 0.26 ug/L of 1,4 dioxane in the August 24, 2018 field blank indicates that the 1,4-dioxane results for samples collected as part of the associated SDG may be biased high. There were no other field blanks with any indication of cross contamination which supports the adequate decontamination of sampling equipment between sampling locations.

The data validation prepared by Cadena further supports the quality of the data. None of the data were rejected.

The August 1, 2017 Work Plan, under which the 2018 Annual Sampling Event was completed, recommended elimination of testing for SVOCs (with the exception of 1,4-dioxane), PCBs, and the full list of TAL metals because these data have done little, if anything, to improve the understanding of Site-related COCs. In addition, the Work Plan also recommended eliminating the general chemistry parameters of alkalinity, chloride, and sulfate because these parameters have been used to assess potential biodegradation and attenuation, and sufficient analyses have been performed regarding these mechanisms. At the request of USEPA, these analytes, with the exception of SVOCs and PCBs in surface water, were again tested for during the 2018 Annual Sampling Event and the results of the 2018 Annual Sampling Event continue to support this recommendation.

More specifically:

- Of the SVOCs, only hexachlorobenzene and one instance of benzo(a)anthracene were detected slightly above their respective NJGWQS and these compounds are not identified as Site-related COCs. Furthermore, the three reported hexachlorobenzene concentrations within the PMP area were all flagged with an "*" indicating that the

laboratory control sample recoveries were above acceptable limits such that the results are biased high.

- PCBs were not detected in any of the groundwater or mine water samples.

- Metals reported above their NJGWQS or NJSWQS are largely naturally occurring and, with the exception of arsenic and lead, are not identified as Site-related COCs.

In a letter dated October 22, 2018, the USEPA approved the Final Remedial Design for Operable Unit 2 (OU2). One element of the Final Remedial Design is an Interim Monitoring Plan required under the OU2 Record of Decision to be implemented until the groundwater remedy (OU3) is selected for the Site. The Interim Monitoring Plan approved by the USEPA as a part of the OU2 Final Remedial Design approval includes an analytical program consisting of VOCs, 1,4-dioxane, arsenic and lead, and the results of the 2018 Annual Sampling Event continue to support this analytical program.

With the USEPA's approval of the Final Remedial Design and associated Interim Monitoring Plan, ongoing monitoring at the Site will now be in accordance with the Interim Monitoring Plan, and the Annual Sampling Event will be discontinued. The timing of the first sampling event under the Interim Monitoring Plan will be coordinated with the USEPA.

Please contact us if you have questions or comments on the enclosed submittal.

Sincerely,

CORNERSTONE ENVIRONMENTAL GROUP, LLC

Gary J. DiPippo, Professional Engineer.
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Enclosure

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Table 1
Summary Data for Monitoring Wells
Ringwood Mines/Landfill Superfund Site

Well ID	Old Well ID	Month/Year of Installation	Elevation Data		Location Data		Monitoring Well and Boring Data							
			Ground Surface (ft msl)	Top of Protective Casing (ft msl)	Northing (ft)	Easting (ft)	Well Type	Diameter (inches)	Well Material	Open Hole or Screened Interval (ft bgs)	Total Depth (ft bgs)	Bottom Elevation (ft msl)	Depth to Bedrock (ft bgs)	Bedrock Elevation (ft msl)
OB-1	OB-1	Jul-84	542.60	544.37	39,190	7,294	BR	6	SS	5 to 31	31	512	3	540
OB-2	OB-2	Jul-84	561.40	562.30	37,821	7,508	BR	6	SS	8 to 42	42	519	4	557
OB-3	OB-3	Jul-84	495.60	496.53	37,840	7,275	BR	6	SS	9 to 24	24	472	7	489
OB-4	OB-4	Jul-84	510.60	510.80	37,889	8,348	BR	6	SS	28 to 61	61	450	25	486
OB-5	OB-5	Jul-84	457.90	458.83	37,607	8,634	BR	6	SS	18 to 63	63	395	18 est.	440
OB-6	OB-6	Jul-84	605.00	607.28	39,828	8,053	BR	6	SS	10 to 36	36	569	8	597
OB-7	OB-7	Jul-84	503.40	503.91	40,068	9,003	BR	6	SS	14 to 42	42	461	11	492
OB-8	OB-8	Jul-84	572.50	574.25	43,461	8,737	UC	4	PVC	7 to 17	23	550	18 est.	555
OB-9*	OB-9*	Jul-84	507.60	508.56	41,191	9,759	UC	4	PVC	51 to 61	63	445	NE	---
OB-10	OB-10	Jul-84	349.70	352.04	39,683	12,200	UC	4	PVC	10 to 20	20	330	NE	---
OB-11**	OB-11**	Sep-84	529.60	530.25	42,601	9,614	UC	4	PVC	14 to 24	25	505	NE	---
OB-11R	OB-11**	Oct-09	530.20	532.10	842,498	555,994	UC	2	PVC	25 to 40	40	490.2	NE	---
OB-12	OB-12	Mar-86	557.60	558.36	37,360	7,685	BR	6	SS	9 to 40	40	518	6	552
OB-13	OB-13	Mar-86	499.10	500.35	37,180	8,195	BR	6	SS	8 to 60	60	439	5	494
OB-14A	OB-14A	Mar-86	500.80	501.40	41,855	10,070	UC	4	SS	4 to 14	20	481	NE	---
OB-14B	OB-14B	Mar-86	503.10	504.11	41,830	10,045	UC	4	SS	25 to 35	40	463	NE	---
OB-15A**	OB-15A***	Mar-86	515.00	515.82	42,520	9,990	UC	4	SS	2 to 12	20	495	NE	---
OB-15B	OB-15B	Mar-86	509.30	511.27	42,525	9,999	UC	4	SS	25 to 35	40	469	NE	---
OB-16	OB-16	Nov-91	488.60	492.30	41,525	10,020	UC	4	SS	5 to 15	15	474	NE	---
OB-17	OB-17	Nov-91	486.80	490.26	41,327	10,009	UC	4	SS	3 to 13	13	474	NE	---
OB-18	OB-18	Nov-91	494.60	496.26	41,183	9,965	UC	4	SS	10 to 20	20	475	NE	---
OB-19	MW-19 OB	Mar-06	530.70	532.39	842,739	555,930	UC	2	PVC	5 to 20	24	506.7	NE	---
OB-20A	MW-20 OB	Mar-06	532.10	533.67	842,589	555,816	UC	2	PVC	5 to 20	22	510.1	NE	---
OB-20B	MW-20 OB-34	Mar-06	532.10	534.03	842,575	555,812	UC	2	PVC	24 to 34	35	497.1	NE	---
OB-21	MW-21 OB	Mar-06	537.70	539.48	842,790	555,570	UC	2	PVC	6 to 21	22	515.7	NE	---
OB-22†	OB-19	Oct-06	515.46	518.36	841,207	556,108	UC	2	PVC	10 to 20	20	495.5	NE	---
OB-23†	OB-20	Oct-06	512.75	515.65	841,571	556,225	UC	2	PVC	10 to 20	20	492.8	NE	---
OB-24†	OB-21	Oct-06	497.99	500.89	841,911	556,256	UC	2	PVC	5 to 15	15	483.0	NE	---
OB-25†	OB-22	Oct-06	524.41	527.31	841,978	555,959	UC	2	PVC	10 to 20	20	504.4	NE	---
OB-26†		Dec-07	542.33	545.23	843,530	557,437	UC	2	PVC	9 to 24	24.5	517.8	21	521.3
OB-27		Oct-09	529.60	532.38	842,638	555,994	UC	2	PVC	24.5 to 39.5	39.5	490.1	NE	---
OB-28		Mar-10	483.60	485.91	841,254	556,420	UC	2	PVC	3 to 18	18	465.6	NE	---
OB-29		Dec-11	350.30	349.88	839,517	558,588	UC	2	PVC	18 to 35	35	315.3	NE	---
OB-30A		Apr-12	531.00	533.30	842,334	555,867	UC	2	PVC	8 to 18	18	513	NE	---
OB-30B		Apr-12	531.00	533.50	842,344	555,863	UC	2	PVC	21 to 36	36	495	NE	---
OB-30C		Apr-12	530.60	533.01	842,342	555,871	UC	2	PVC	40 to 50	50	480.6	NE	---

Table 1
Summary Data for Monitoring Wells
Ringwood Mines/Landfill Superfund Site

Well ID	Old Well ID	Month/Year of Installation	Elevation Data		Location Data		Monitoring Well and Boring Data							
			Ground Surface (ft msl)	Top of Protective Casing (ft msl)	Northing (ft)	Easting (ft)	Well Type	Diameter (inches)	Well Material	Open Hole or Screened Interval (ft bgs)	Total Depth (ft bgs)	Bottom Elevation (ft msl)	Depth to Bedrock (ft bgs)	Bedrock Elevation (ft msl)
OB-31		Jan-16	530.14	533.26	842,659	555,938	UC	2	PVC	20 to 30	30	500.1	40	490.1
OB-32		Jan-16	531.27	534.25	842,522	555,864	UC	2	PVC	10 to 20	20	511.3	20	511.3
OB-33		Mar-16	516.48	518.89	842,366	556,422	UC	2	PVC	65 - 75	75	441.5	85	431.48
SC-1‡	DB-1	Mar-06	531.03	532.53	842,621	555,819	SB	2	PVC	64.4 to70.9	70.9	435.03	144	387.03
SC-2	MW-1/CMI-S5	Dec-07	561.70	564.13	837,560	554,029	SB	2	PVC	47 to 67	67	494.7	NE	---
RW-1(64-74)	RW-1	Apr-10	548.20	549.38	839,093	553,653	BR	1	PVC/ZIST	64 to 74	74	474	4	544
RW-1(131-141)	RW-1	Apr-10	548.20	549.42	839,093	553,653	BR	1	PVC/ZIST	131 to 141	141	407	4	544
RW-2(279-289)	RW-2	Apr-10	512.60	512.23	837,788	554,659	BR	1	PVC/ZIST	279 to 289	289	224	6	507
RW-2(452-462)	RW-2	Apr-10	512.60	512.19	837,788	554,659	BR	1	PVC/ZIST	452 to 462	462	51	6	507
RW-3(77-87)		Apr-10	527.70	528.15	842,511	556,138	BR	1	PVC/ZIST	77 to 87	87	441	58	470
RW-3DS(155-160)		Mar-10	527.90	529.51	842,509	556,123	BR	1	PVC/ZIST	155 to 160	160	368	62	466
RW-3DD(175-180)		Mar-10	527.90	529.41	842,509	556,123	BR	1	PVC/ZIST	175 to 180	181	347	62	466
RW-4A(62-72)		Apr-10	539.00	541.41	842,669	556,738	BR	1	PVC/ZIST	62 to 72	72	467	30	509
RW-4A(113-123)		Apr-10	539.00	541.60	842,669	556,738	BR	1	PVC/ZIST	113 to 123	123	416	30	509
RW-4(333-343)	RW-4	Apr-10	539.20	540.01	842,661	556,725	BR	1	PVC/ZIST	333 to 343	343	196	54	485
RW-4(393-403)	RW-4	Apr-10	539.20	539.87	842,661	556,725	BR	1	PVC/ZIST	393 to 403	403	136	54	485
RW-5A		Sep-07	530.70	533.26	842,737	555,957	BR	2	PVC	54 to 74	75	456	30	500.7
RW-5	MW-19 BR	Mar-06	530.30	533.48	842,748	555,928	BR	2	PVC	99 to 119	119	411.3	28	502.3
RW-6A		Sep-07	531.81	534.32	842,586	555,835	BR	2	PVC	58 to 78	78.6	453	38	493.81
RW-6	MW-20 BR	Mar-06	531.90	533.96	842,583	555,819	BR	2	PVC	99 to 119	120	411.9	36	495.9
RW-7	MW-21 BR	Mar-06	537.60	539.43	842,793	555,573	BR	2	PVC	99 to 119	120	417.6	22	515.6
RW-8A(47-57)		Apr-10	568.10	569.55	837,499	553,942	BR	1	PVC/ZIST	47 to 57	57	511	3	565.1
RW-8(163-173)	RW-8	Apr-10	569.00	570.01	837,485	553,944	BR	1	PVC/ZIST	163 to 173	173	396	3	566.0
RW-8(204-214)	RW-8	Apr-10	569.00	570.01	837,485	553,944	BR	1	PVC/ZIST	204 to 214	214	355	3	566.0
RW-9A(25-35)		Apr-10	560.10	561.82	837,543	554,173	BR	1	PVC/ZIST	25 to 35	35	525	8	552.1
RW-9A(85-95)		Apr-10	560.10	561.73	837,543	554,173	BR	1	PVC/ZIST	85 to 95	95	465	8	552.1
RW-9(139-149)	RW-9	Apr-10	560.40	561.81	837,532	554,181	BR	1	PVC/ZIST	139 to 149	149	411	12	548.4
RW-9(206-216)	RW-9	Apr-10	560.40	561.91	837,532	554,181	BR	1	PVC/ZIST	206 to 216	216	344	12	548.4
RW-10A(51-61)		Apr-10	537.90	539.43	837,266	554,285	BR	1	PVC/ZIST	51 to 61	61	477	4	533.9
RW-10A(75-85)		Apr-10	537.90	539.45	837,266	554,285	BR	1	PVC/ZIST	75 to 85	85	453	4	533.9
RW-10(120-130)	RW-10	Apr-10	539.50	540.78	837,261	554,276	BR	1	PVC/ZIST	120 to 130	130	410	3	536.5
RW-10(185-195)	RW-10	Apr-10	539.50	540.76	837,261	554,276	BR	1	PVC/ZIST	185 to 195	195	345	3	536.5
RW-11(236-241)		Mar-10	527.80	529.81	842,825	556,002	BR	1	PVC/ZIST	236 to 241	241	286.8	9	518.8
RW-11(262-267)		Mar-10	527.80	529.80	842,825	556,002	BR	1	PVC/ZIST	262 to 267	267	260.8	9	518.8
RW-12(55-65)		Aug-14	350.50	350.30	839,517	558,588	BR	1	PVC/ZIST	55 to 65	65	286	38	312.5
RW-12(130-140)		Aug-14	350.50	350.26	839,517	558,588	BR	1	PVC/ZIST	130 to 140	140	211	38	312.5

Table 1
Summary Data for Monitoring Wells
Ringwood Mines/Landfill Superfund Site

Well ID	Old Well ID	Month/Year of Installation	Elevation Data		Location Data		Monitoring Well and Boring Data							
			Ground Surface (ft msl)	Top of Protective Casing (ft msl)	Northing (ft)	Easting (ft)	Well Type	Diameter (inches)	Well Material	Open Hole or Screened Interval (ft bgs)	Total Depth (ft bgs)	Bottom Elevation (ft msl)	Depth to Bedrock (ft bgs)	Bedrock Elevation (ft msl)
RW-13(71-91)		Aug-14	530.00	532.45	842,359	555,872	BR	2	PVC	71 to 91	91.35	439	58	472.0
RW-13(100-120)		Aug-14	530.60	533.23	842,356	555,862	BR	1	PVC/ZIST	100 to 120	120	411	58	472.6
RW-13(150-170)		Aug-14	530.60	533.30	842,356	555,862	BR	1	PVC/ZIST	150 to 170	170	360.6	58	472.6
RW-14S (135-153)		May-16	530.38	531.53	842,509	555,867	BR	1	PVC/ZIST	135 to 153	153	377	52	478.38
RW-14D (175-185)		May-16	530.38	531.62	842,509	555,867	BR	1	PVC/ZIST	175 to 185	185	345	52	478.38
RW-15S (110-120)		May-16	516.01	518.66	842,362	556,409	BR	1	PVC/ZIST	110 to 120	120	396	85	431.01
RW-15D (127-137)		May-16	516.01	518.64	842,362	556,409	BR	1	PVC/ZIST	127 to 137	137	379	85	431.01
RW-16 (52-62)		Mar-16	505.53	507.22	841,851	556,208	BR	2	PVC	52 to 62	62	444	35	470.53

Notes:
Northing and easting are based on a site-specific plane coordinate system.
* = OB-9 was destroyed in October 1989 during land clearing and grading by a developer unrelated to remedial activities.
** = OB-11 was destroyed during SR-3 excavation work in 2006.
*** = OB-15A, which was screened across paint sludge, was decommissioned in 1987 during the paint sludge removal work at Location A.
† = Elevation data, ground surface (msl) not surveyed.
‡ = Elevation data based on a directional well extending 97.5 ft bgs and 150 ft in length.
§ = Top of protective casing measured from outer steel casing prior to well construction.
--- = not available
BR = bedrock well
bgs = below ground surface
est. = uncertain about bedrock depth and elevation
ft = feet
msl = mean sea level
NE = not encountered
PVC = polyvinyl chloride
S = steel
SB = soil boring
SS = stainless steel
UC = unconsolidated well
ZIST = zone isolation system technology

TABLE 2
ANNUAL SAMPLING EVENT WATER LEVELS
AUGUST 20, 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

WELL ID	Date	TIME	DTW	DTB
OB-1	8/20/2018	10:08	6.1	33.1
OB-2	8/20/2018	11:23	17.62	42.35
OB-3	8/20/2018	10:57	3.95	23.5
OB-4	8/20/2018	10:18	17.35	60.45
OB-5	8/20/2018	11:50	2.05	63.8
OB-6	8/20/2018	10:01	6.33	34.2
OB-7	8/20/2018	9:56	4.85	42.1
OB-10	8/20/2018	12:09	6.48	21.1
OB-11R	8/20/2018	8:29	16.9	38.55
OB-12	8/20/2018	11:27	9.49	39.75
OB-13	8/20/2018	11:44	12.5	32.15
OB-14A	8/20/2018	9:23	9.01	16.3
OB-14B	8/20/2018	9:24	11.79	37.35
OB-15B	8/20/2018	8:43	2.43	31.2
OB-16	8/20/2018	9:30	5.75	17.7
OB-17	8/20/2018	9:34	5.15	16.7
OB-18	8/20/2018	9:39	3.32	21.75
OB-19	8/20/2018	8:38	11.98	21.3
OB-20A	8/20/2018	8:26	14.98	20.6
OB-20B	8/20/2018	8:27	14.47	36
OB-21	8/20/2018	8:34	6.68	20.2
OB-22	8/20/2018	9:42	13.01	21.85
OB-23	8/20/2018	9:26	17.15	21.44
OB-24	8/20/2018	9:18	3.98	18.05
OB-25	8/20/2018	10:37	11.35	18.5
OB-27	8/20/2018	8:31	14.99	40.15
OB-28	8/20/2018	9:37	1.48	18.2
OB-29	8/20/2018	12:04	5.46	34.66
OB-30A	8/20/2018	8:17	18.17	20.65
OB-30B	8/20/2018	8:18	18.07	38.5
OB-30C	8/20/2018	8:16	17.77	52.05
OB-31	8/20/2018	8:36	14.97	33
OB-32	8/20/2018	8:23	17.4	20
OB-33	8/20/2018	8:49	8.71	76
SC-1	8/20/2018	8:25	56.52	109
SC-2	8/20/2018	11:20	59.63	69.22
RW-1S	8/20/2018	10:07	10.85	74
RW-1D	8/20/2018	10:06	10.58	141
RW-2S	8/20/2018	10:26	9.5	289
RW-2D	8/20/2018	10:25	10.66	462
RW-3	8/20/2018	9:05	39.14	87
RW-3DS	8/20/2018	9:07	15.4	165
RW-3DD	8/20/2018	9:06	15.08	185
RW-4A-S	8/20/2018	8:50	15	72
RW-4A-D	8/20/2018	8:57	30.12	123
RW-4S	8/20/2018	9:00	28.45	343
RW-4D	8/20/2018	8:58	28.92	403
RW-5A	8/20/2018	8:33	12.09	75.6
RW-5	8/20/2018	8:38	12.39	100
RW-6A	8/20/2018	8:23	13.61	80.25
RW-6	8/20/2018	8:24	12.93	122.1

TABLE 2
ANNUAL SAMPLING EVENT WATER LEVELS
AUGUST 20, 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

WELL ID	Date	TIME	DTW	DTB
RW-7	8/20/2018	8:34	2.86	100
RW-8A	8/20/2018	11:06	Dry	57
RW-8S	8/20/2018	11:08	54.6	173
RW-8D	8/20/2018	11:07	59.65	214
RW-9A-S	8/20/2018	11:12	18.3	35
RW-9A-D	8/20/2018	11:13	56.75	95
RW-9S	8/20/2018	11:16	58.43	149
RW-9D	8/20/2018	11:15	41.75	216
RW-10A-S	8/20/2018	11:38	34.19	61
RW-10A-D	8/20/2018	11:37	36.8	85
RW-10S	8/20/2018	11:33	40.86	130
RW-10D	8/20/2018	11:34	39.29	195
RW-11S	8/20/2018	8:43	16.1	241
RW-11D	8/20/2018	8:44	NA	267
RW-12S	8/20/2018	12:07	water to top of casing	65
RW-12D	8/20/2018	12:07	water to top of casing	140
RW-13 (71-91)	8/20/2018	8:15	11.88	91
RW-13 (100-120)	8/20/2018	8:14	water to top of casing	120
RW-13 (150-170)	8/20/2018	8:14	water to top of casing	170
RW-14S	8/20/2018	8:20	10.22	153
RW-14D	8/20/2018	8:21	1.07	185
RW-15S	8/20/2018	8:42	9.63	120
RW-15D	8/20/2018	8:43	9	137
RW-16	8/20/2018	9:17	4.95	62
PMP-AS-50	8/20/2018	8:40	8.09	400
PMP-AS-180	8/20/2018	8:40	8.09	400
PMP-AS-230	8/20/2018	8:40	8.09	400
CMP-AS-50	8/20/2018	10:43	8.04	400
CMP-AS-100	8/20/2018	10:43	8.04	400
CMP-AS-160	8/20/2018	10:43	8.04	400
CMP-AS-275	8/20/2018	10:43	8.04	400

DTW = Depth to Water
DTB = Depth to Bottom
All measurments from top of casing

Table 3
Summary of Well Performance and Sample Collection
August 2016
Ringwood Mines/Landfill Superfund Site

Well ID	Well Diameter	Date Sampled	Purge Rate (discharge seconds/ recharge seconds)	Volume Purged (ml) Prior to Sample Collection	Analytical Samples Collected	Purge Time (minutes)	Purge Rate (milliliters per minute)
Peters Mine Pit Area							
RW-3(77-87)	1" ZIST	8/30/2018	10 sec/60 sec	1600	Full Suite	10	150
RW-3DS (155-160)	1" ZIST	8/30/2018	15 sec/60 sec	800	Full Suite	15	60
RW-3DD (175-180)	1" ZIST	8/30/2018	10 sec/60 sec	800	Full Suite	5	200
RW-4A(62-72)	1" ZIST	8/30/2018	10 sec/60 sec	1600	Full Suite	15	100
RW-4A(113-123)	1" ZIST	8/30/2018	10 sec/60 sec	1600	Full Suite	15	100
RW-4(333-343)	1" ZIST	8/30/2018	15 sec/60 sec	1600	Full Suite	10	160
RW-4(393-403)	1" ZIST	8/30/2018	15 sec/60 sec	1600	Full Suite	15	100
RW-5A (54-74)	2"	8/22/2018	5sec/10 sec	5400**	Full Suite	45	120
RW-5 (99-119)	2"	8/24/2018	5sec/10 sec	6000**	Full Suite	50	120
RW-6A(58-78)	2"	8/23/2018	5sec/10 sec	6280**	Full Suite	35	180
RW-6(99-119)	2"	8/23/2018	5sec/10 sec	12500**	Full Suite	35	280
RW-7 (99-119)	2"	8/22/2018	5sec/10 sec	8400**	Full Suite	40	240
RW-11S(236-241)	1" ZIST	8/31/2018	10 sec/60 sec	800	Full Suite	10	100
RW-11D(262-267)	1" ZIST	8/31/2018	10 sec/60 sec	800	Full suite	10	80
RW-13(71-91)	2"	8/24/2018	5sec/10 sec	10800**	Full Suite	45	240
RW-13(100-120)	ZIST	8/30/2018	10sec/60 sec	3200	Full Suite	50	60
RW-13(150-170)	ZIST	8/30/2018	10 sec/60 sec	3200	Full Suite	15	220
RW-14S(135-153)	ZIST	8/31/2018	10 sec/60 sec	3200	Full Suite	25	140
RW-14D(175-185)	ZIST	8/31/2018	10 sec/60 sec	1600	Full Suite	20	80
RW-15S(110-120)	ZIST	8/31/2018	10 sec/60 sec	1600	Full Suite	10	160
RW-15D(127-137)	ZIST	8/31/2018	10 sec/60 sec	1600	Full Suite	10	160
OB-11R	2"	8/22/2018	5sec/10 sec	8400**	Full Suite	35	240
OB-15B	4"	8/22/2018	5sec/10 sec	14400**	Full Suite	45	320
OB-19	2"	8/22/2018	5sec/10 sec	11200**	Full Suite	40	280
OB-20A	2"	8/23/2018	5sec/10 sec	11350**	Full Suite	45	200
OB-20B	2"	8/23/2018	5sec/10 sec	8000**	Full Suite	50	140
OB-21	2"	8/22/2018	5sec/10 sec	12000**	Full Suite	60	200
OB-25	2"	8/21/2018	5sec/10 sec	20800**	Full Suite	85	150
OB-27	2"	8/22/2018	5sec/10 sec	13750**	Full Suite	55	320
OB-30A	2"	8/24/2018	5sec/10 sec	12000**	Full Suite	50	240
OB-30B	2"	8/22/2018	5sec/10 sec	11200**	Full Suite	40	280
OB-30C	2"	8/23/2018	5sec/10 sec	9350**	Full Suite	55	170
OB-31	2"	8/22/2018	5sec/10 sec	12600**	Full Suite	45	280
OB-32	2"	8/22/2018	5sec/10 sec	16000**	Full Suite	50	320
OB-33	2"	8/22/2018	5sec/10 sec	17600**	Full Suite	55	320
PMS-50	2"	8/24/2018	continuous	17500*	Full Suite	35	500
PMS-180	2"	8/24/2018	continuous	15000*	Full Suite	30	500
PMS-230	2"	8/24/2018	continuous	17500*	Full Suite	35	500
SC-1	2"	8/24/2018	5sec/10 sec	16000**	Full Suite	40	400

- Color indicates very slow recharge and partial laboratory suite collected
- Color indicates no recharge or lack of adequate volume for sample collection
- Color indicates full analytical suite collected. Note, some zones recharged slower than others
- Color indicates very slow recharge with samples collected over a 24-hour period

ZIST - Zone Isolation System Technology monitoring well
** - Indicates monitoring well was purged with a bladder pump utilizing low-flow sample procedures
* - Indicates monitoring well was purged with a 2 inch Grundfos Pump and drop tubing
NR - Not Recorded

Table 3
Summary of Well Performance and Sample Collection
August 2016
Ringwood Mines/Landfill Superfund Site

Well ID	Well Diameter	Date Sampled	Purge Rate (discharge seconds/ recharge seconds)	Volume Purged (ml) Prior to Sample Collection	Analytical Samples Collected	Purge Time (minutes)	Purge Rate (milliliters per minute)
Cannon Mine Pit Area							
RW-1(64-74)	1" ZIST	NS	NS	NS	NS	NS	NS
RW-1(131-141)	1" ZIST	NS	NS	NS	NS	NS	NS
RW-2(279-289)	1" ZIST	8/28/2018	10 sec/60 sec	1600	Full Suite	20	80
RW-2(452-462)	1" ZIST	8/28/2018	20 sec/45 sec	1600	Full Suite	30	50
RW-8(163-173)	1" ZIST	8/29/2018	15 sec/60 sec	1600	Full Suite	15	100
RW-8(204-214)	1" ZIST	8/29/2018	15 sec/60 sec	1600	Full Suite	20	80
RW-8A(47-57)	1" ZIST	8/29/2018	Well Dry	Well Dry	NS	NS	NS
RW-9(139-149)	1" ZIST	8/29/2018	Well Dry	Well Dry	NS	NS	NS
RW-9(206-216)	1" ZIST	8/29/2018	20 sec/60 sec	1600	Full Suite	15	100
RW-9A(25-35)	1" ZIST	8/29/2018	Well Dry	Well Dry	NS	NS	NS
RW-9A(85-95)	1" ZIST	8/29/2018	10 sec/60 sec	800	Full Suite	20	40
RW-10(120-130)	1" ZIST	8/28/2018	10 sec/60 sec	1600	Full Suite	15	100
RW-10(185-195)	1" ZIST	8/28/2018	10 sec/60 sec	1600	Full Suite	10	160
RW-10A(51-61)	1" ZIST	8/28/2018	10 sec/60 sec	1600	Full Suite	20	80
RW-10A(75-85)	1" ZIST	8/28/2018	15 sec/30 sec	1600	Full Suite	10	150
OB-2	6"	8/23/2018	5sec/10 sec	12800**	Full Suite	40	320
OB-3	6"	8/22/2018	5sec/10 sec	7000**	Full Suite	25	280
OB-4	6"	8/21/2018	5sec/10 sec	7200**	Full Suite	30	240
OB-5	6"	8/23/2018	5sec/10 sec	12800**	Full Suite	40	320
OB-6	6"	8/21/2018	5sec/10 sec	10800**	Full Suite	45	240
OB-7	4"	8/21/2018	5sec/10 sec	9000**	Full Suite	45	200
OB-12	6"	8/23/2018	5sec/10 sec	16000**	Full Suite	50	320
OB-13	6"	8/22/2018	5sec/10 sec	9800**	Full Suite	35	280
CMS-50	2"	8/23/2018	continuous	17500*	Full Suite	35	500
CMS-100	2"	8/23/2018	continuous	17500*	Full Suite	35	500
CMS-160	2"	8/23/2018	continuous	17500*	Full Suite	35	500
CMS-275	2"	8/23/2018	continuous	20000*	Full Suite	45	500
SC-2	2"	8/23/2018	5sec/10 sec	14400**	Full Suite	45	320

- Color indicates very slow recharge and partial laboratory suite collected
- Color indicates no recharge or lack of adequate volume for sample collection
- Color indicates full analytical suite collected. Note, some zones recharged slower than others
- Color indicates very slow recharge with samples collected over a 24-hour period

ZIST - Zone Isolation System Technology monitoring well
** - Indicates monitoring well was purged with a bladder pump utilizing low-flow sample procedures
* - Indicates monitoring well was purged with a 2 inch Grundfos Pump and drop tubing
NS - Not sampled
NR - Not Recorded

Table 3
Summary of Well Performance and Sample Collection
August 2016
Ringwood Mines/Landfill Superfund Site

Well ID	Well Diameter	Date Sampled	Purge Rate (discharge seconds/ recharge seconds)	Volume Purged (ml) Prior to Sample Collection	Analytical Samples Collected	Purge Time (minutes)	Purge Rate (milliliters per minute)
O'Connor Disposal Area							
OB-10	4"	8/22/2018	5sec/10 sec	5700**	Full Suite	35	400
OB-14A	4"	8/21/2018	5sec/10 sec	5700**	Full Suite	30	160
OB-14B	4"	8/21/2018	5sec/10 sec	8400**	Full Suite	35	240
OB-16	4"	8/21/2018	5sec/10 sec	12600**	Full Suite	35	360
OB-17	4"	8/21/2018	5sec/10 sec	8400**	Full Suite	35	240
OB-18	4"	8/21/2018	5sec/10 sec	16000**	Full Suite	50	320
OB-22	2"	8/21/2018	5sec/10 sec	6800**	Full Suite	30	160
OB-23	2"	8/21/2018	5sec/10 sec	10800**	Full Suite	45	240
OB-24	2"	8/22/2018	5sec/10 sec	14400**	Full Suite	40	360
OB-28	2"	8/21/2018	5sec/10 sec	17600**	Full Suite	55	320
OB-29	2"	8/22/2018	5sec/10 sec	18900**	Full Suite	55	280
RW-12 (55-65)	1" ZIST	8/29/2018	15 sec/60 sec	1600	Full Suite	15	100
RW-12 (130-140)	1" ZIST	8/29/2018	10sec/60sec	1600	Full Suite	10	160
RW-16 (52-62)	2"	8/21/2018	5sec/10 sec	14400**	Full Suite	45	320

- Color indicates very slow recharge and partial laboratory suite collected
- Color indicates no recharge or lack of adequate volume for sample collection
- Color indicates full analytical suite collected. Note, some zones recharged slower than others
- Color indicates very slow recharge with samples collected over a 24-hour period

ZIST - Zone Isolation System Technology monitoring well
** - Indicates monitoring well was purged with a bladder pump utilizing low-flow sample procedures
NS - Not sampled

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2018)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-1*	5 - 31'	9/26/2006	4.70	143.5	5.59	0.059	14.42	4.98
		4/6/2007	2.00	109.3	6.12	0.075	7.02	8.87
		4/30/2008	2.70	196.9	5.57	0.033	9.04	7.52
		9/8/2008	0.50	364.3	5.66	0.083	14.51	6.00
		7/2/2009	1.10	309.3	5.60	0.051	12.57	5.84
		10/22/2009	0.37	124.4	5.52	0.054	13.08	4.66
		5/26/2010	1.21	211.6	5.69	0.036	10.63	6.67
		5/17/2011	6.30	39.0	6.82	0.169	10.27	3.12
		4/26/2012	3.20	237.0	5.73	0.048	9.37	5.93
		11/5/2013	NS	NS	NS	NS	NS	NS
		8/10/2015	NS	NS	NS	NS	NS	NS
		8/17/2016	NS	NS	NS	NS	NS	NS
		8/14/2017	NS	NS	NS	NS	NS	NS
		NS	---	---	---	---	---	---
OB-2*	8 - 42'	10/2/2006	2.30	161.6	5.91	0.110	11.22	6.28
		4/6/2007	1.00	60.2	6.08	0.120	10.12	6.28
		4/28/2008	0.00	18.5	5.95	0.990	9.82	9.36
		9/17/2008	1.32	152.9	5.13	0.129	14.31	8.41
		6/30/2009	0.65	183.1	5.91	0.099	10.20	7.47
		10/20/2009	0.00	181.0	5.99	0.096	12.75	7.81
		5/25/2010	1.52	153.1	5.77	0.065	12.93	8.53
		5/16/2011	1.46	152.1	5.81	0.145	10.83	6.19
		4/19/2012	0.00	276.0	5.65	0.157	13.07	7.42
		11/18/2013	0.00	223.0	5.96	0.188	12.57	4.66
		9/15/2014	0.00	205.0	5.46	0.172	13.24	6.14
		8/12/2015	16.40	224.9	6.05	0.124	14.70	7.00
		8/17/2016	0.00	396.0	6.02	0.128	13.67	6.03
		8/22/2017	4.10	136.0	6.04	0.116	14.80	6.23
		8/23/2018	0.00	197.0	6.05	0.117	12.51	6.41
OB-3*	9 - 24'	9/28/2006	18.20	172.3	5.76	0.088	13.55	6.05
		4/3/2007	2.50	163.0	5.81	0.096	7.76	8.60
		4/28/2008	21.00	170.1	5.97	0.072	9.11	6.47
		9/9/2008	9.86	236.2	5.63	0.252	13.69	4.08
		6/30/2009	0.40	115.0	6.21	0.110	10.43	4.09
		10/20/2009	22.00	-79.7	6.31	0.077	13.42	0.31
		5/25/2010	30.00	61.0	6.34	0.072	11.11	2.36
		5/18/2011	36.70	158.0	6.17	0.188	11.59	4.78
		4/13/2012	2.60	202.0	6.65	0.145	9.65	8.64
		11/5/2013	25.50	95.0	6.74	0.140	12.29	3.27
		9/8/2014	3.80	96.0	6.64	0.177	13.57	4.23
		8/10/2015	28.60	84.1	6.37	0.749	13.80	5.13
		8/16/2016	14.10	248.0	6.35	0.145	15.38	5.57
		8/21/2017	17.30	118.0	6.31	0.131	13.88	4.70
		8/22/2018	26.60	218.0	5.91	0.105	14.70	6.68
OB-4*	28 - 61'	9/29/2006	7.90	-23.8	6.49	0.877	13.37	0.13
		4/6/2007	6.00	-142.2	7.18	0.966	12.06	0.29
		4/28/2008	0.00	-52.0	6.49	0.689	12.40	0.25
		9/10/2008	2.14	-32.4	6.87	0.377	13.79	0.25
		7/1/2009	9.56	-80.0	6.73	0.338	12.66	0.06
		10/20/2009	11.40	-25.7	6.81	0.305	14.61	0.44
		5/26/2010	5.35	-41.9	5.77	0.790	13.81	0.19
		5/17/2011	0.00	70.0	5.24	0.961	12.28	1.12
		4/27/2012	16.20	-59.0	6.65	0.902	11.80	1.25
		11/13/2013	2.10	-115.0	6.72	1.170	12.72	1.01

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2018)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
		9/15/2014	0.00	-99.0	6.92	1.020	18.35	0.65
		8/10/2015	0.00	-83.0	6.71	1.050	13.72	3.70
		8/17/2016	0.00	-61.0	6.63	0.813	15.07	0.00
		8/16/2017	0.00	-74.0	6.76	0.986	15.17	0.46
		8/21/2018	0.00	-55.0	6.62	0.886	15.32	0.32
		10/2/2006	6.20	-65.4	6.47	0.914	14.02	0.30
		4/4/2007	23.00	-69.3	6.47	0.966	9.42	0.26
		4/28/2008	2.80	-87.5	6.64	0.918	10.33	0.38
		9/9/2008	0.80	-53.2	6.37	1.006	13.39	0.09
		7/1/2009	18.70	-112.1	7.01	0.557	10.83	0.55
		10/21/2009	16.20	-91.0	6.87	0.479	11.84	0.18
		5/26/2010	5.25	-170.6	6.70	0.659	13.75	0.32
OB-5*	18 - 63'	5/17/2011	0.00	-175.0	7.17	0.998	10.95	2.12
		4/19/2012	0.00	-177.0	7.40	0.861	15.76	2.28
		11/11/2013	10.20	-172.0	7.32	0.705	12.39	0.50
		9/8/2014	12.10	-119.0	7.08	0.864	15.10	5.00
		8/10/2015	0.00	-136.0	6.72	0.798	13.20	0.00
		8/18/2016	0.00	-55.0	6.41	0.874	14.36	0.20
		8/21/2017	3.50	-79.0	6.52	0.962	14.61	0.20
		8/23/2018	0.00	-53.0	6.54	0.777	14.85	2.20
		9/26/2006	9.00	-3.0	6.11	18.00	0.460	0.22
		4/5/2007	4.00	66.5	6.60	0.376	6.47	0.22
		5/1/2008	0.92	-23.8	6.46	0.386	8.85	0.35
		9/8/2008	1.10	163.0	4.07	0.559	19.16	0.37
		7/1/2009	0.54	-18.5	6.44	0.289	15.68	0.28
OB-6*	10 - 36'	10/19/2009	NR	NR	NR	NR	NR	NR
		11/15/2013	2.90	98.0	6.37	0.204	14.13	1.08
		9/8/2014	0.00	60.0	6.49	0.219	14.23	1.07
		8/6/2015	16.60	23.0	6.32	0.231	13.02	0.00
		8/18/2016	20.80	25.0	6.18	0.249	14.64	0.00
		8/16/2017	42.40	61.0	6.12	0.207	15.19	0.20
		8/21/2018	25.90	29.0	6.07	0.177	14.69	0.14
		9/28/2006	9.20	-72.5	6.79	0.652	13.31	0.13
		4/5/2007	19.00	2.1	6.80	0.591	8.76	0.83
		4/29/2008	23.00	-68.4	6.82	0.675	9.69	0.62
		9/10/2008	2.49	-30.6	6.96	0.500	12.74	0.32
		7/1/2009	4.11	-17.8	6.56	0.480	11.90	0.31
		10/21/2009	7.82	-111.8	7.18	0.406	12.42	0.19
		5/25/2010	14.80	-66.2	6.74	0.349	12.41	0.24
OB-7*	14 - 42'	5/17/2011	8.90	-101.0	6.99	0.585	10.38	1.93
		4/19/2012	0.00	-50.0	7.16	0.625	11.90	1.50
		11/12/2013	25.20	-40.0	6.97	0.668	11.23	1.67
		9/5/2014	24.60	-39.0	6.98	0.622	13.30	6.65
		8/24/2015	17.80	-26.0	6.91	0.539	12.82	0.00
		8/18/2016	5.70	-33.0	6.86	0.604	13.87	4.46
		8/16/2017	29.80	-29.0	6.91	0.587	13.28	0.35
		8/21/2018	7.30	-26.0	6.86	0.609	14.09	0.01
		10/2/2006	0.00	-38.5	6.62	0.158	14.97	0.19
		4/3/2007	3.00	9.7	6.58	0.097	4.90	0.25
		4/29/2008	1.70	192.8	5.01	0.120	10.88	3.72
		9/10/2008	0.22	603.0	5.39	0.126	17.82	0.84
		7/1/2009	6.61	-36.1	6.45	0.120	15.73	0.27
		10/21/2009	4.01	57.1	6.15	0.096	11.96	0.53
		5/26/2010	0.62	170.1	6.40	0.099	11.71	2.39

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2018)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-10	10 - 20'	5/17/2011	38.40	205.0	6.10	0.141	10.53	3.17
		4/20/2012	0.00	114.0	6.68	0.131	13.66	3.02
		11/14/2013	1.40	175.0	6.47	0.130	13.61	6.99
		9/9/2014	0.00	224.0	6.34	0.140	11.59	6.91
		8/14/2015	6.50	136.0	6.28	0.108	13.10	2.26
		8/16/2016	0.00	287.0	7.00	0.126	11.74	11.01
		8/18/2017	8.30	199.0	6.27	0.119	12.64	1.91
		8/22/2018	0.00	233.0	6.37	0.124	13.33	2.88
OB-11R	25 - 40'	6/11/2010	35.80	-92.5	6.63	0.340	11.51	0.29
		5/18/2011	56.30	60.0	5.57	0.570	10.27	0.60
		4/26/2012	2.00	-109.0	6.64	0.489	10.10	1.21
		11/8/2013	36.00	-99.0	6.73	0.570	10.82	0.30
		9/11/2014	0.00	-104.0	6.66	0.538	13.30	1.87
		4/21/2015	17.80	-99.0	6.56	0.583	10.07	0.00
		6/1/2015	12.40	-111.0	6.56	0.520	10.37	16.14
		8/6/2015	13.80	-100.0	6.94	0.536	12.28	2.55
		5/25/2016	22.30	121.4	6.61	0.436	12.70	0.77
		8/17/2016	33.50	-81.0	6.26	0.620	12.34	0.95
		2/3/2017	16.70	-102.0	6.89	0.627	8.53	0.00
		8/17/2017	17.40	-101.0	6.60	0.578	12.36	0.13
		8/22/2018	9.80	-104.0	6.54	0.464	17.70	1.76
OB-12	9 - 40'	9/28/2006	1.20	210.4	5.61	0.084	13.03	6.00
		4/3/2007	0.20	186.5	5.41	0.086	8.30	8.40
		4/28/2008	NR	36.8	5.58	0.072	8.69	6.59
		9/9/2008	0.00	194.2	5.77	0.065	11.87	6.95
		6/30/2009	1.79	161.1	5.84	0.064	11.22	4.97
		10/20/2009	0.00	189.9	5.62	0.073	12.79	1.79
		5/25/2010	0.42	209.6	5.31	0.052	11.53	4.98
		5/17/2011	30.00	192.9	5.39	0.052	10.68	4.20
		4/19/2012	0.00	278.0	5.85	0.087	11.36	5.45
		11/18/2013	0.20	203.0	5.89	0.107	14.49	9.78
		9/15/2014	0.00	424.0	5.94	0.107	10.63	5.10
		8/10/2015	65.70	239.6	5.73	0.917	11.60	5.73
		8/17/2016	0.00	469.0	4.77	0.071	12.41	6.18
		8/22/2017	7.60	160.0	5.77	0.081	16.47	7.37
		8/22/2018	0.0	205.0	5.65	0.074	12.36	6.26
OB-13	8 - 60'	10/3/2006	2.60	136.0	5.86	0.103	12.24	6.76
		4/3/2007	0.70	195.4	5.55	0.079	10.83	9.22
		4/28/2008	0.40	184.6	5.93	0.065	9.67	9.61
		9/10/2008	0.10	403.5	5.99	0.152	11.99	7.04
		7/1/2009	0.00	204.0	5.70	0.063	11.30	8.71
		10/21/2009	0.00	60.6	6.10	0.850	11.53	6.48
		5/25/2010	2.38	225.7	5.69	0.044	10.90	8.92
		5/17/2011	0.00	249.0	5.50	0.072	10.58	10.78
		4/20/2012	0.00	142.0	6.30	0.104	11.49	10.07
		11/13/2013	5.00	-73.0	5.57	0.111	11.46	1.55
		9/8/2014	1.50	138.0	6.21	0.089	13.65	2.20
		8/10/2015	40.48	146.4	5.99	0.75	11.60	2.92
		8/16/2016	0.00	396.0	5.98	0.104	13.00	6.21
		8/17/2017	1.60	248.0	5.90	0.083	12.50	3.22
		8/22/2018	0.00	250.0	5.86	0.085	12.84	6.06
		9/27/2006	4.82	-62.0	6.35	0.962	16.23	0.69
		4/9/2007	5.00	-98.3	6.30	0.938	12.90	0.41
		4/30/2008	8.80	-79.6	6.21	0.964	13.96	0.35

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2018)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-14A	4 - 14'	9/11/2008	1.39	-20.3	5.64	0.860	15.27	0.89
		7/6/2009	1.10	-27.3	5.49	0.715	13.97	0.44
		10/23/2009	10.55	-20.3	6.13	0.676	13.80	0.73
		5/28/2010	0.93	78.5	6.10	0.693	12.59	0.35
		5/19/2011	63.70	-71.0	6.35	0.781	12.33	5.34
		4/18/2012	0.50	-55.0	6.86	0.610	14.30	1.98
		11/6/2013	0.00	2.0	6.76	0.891	13.14	2.02
		9/11/2014	0.00	-76.0	6.26	0.805	14.36	1.14
		8/13/2015	14.70	-58.0	6.08	0.701	17.00	0.05
		5/23/2016	18.50	-10.4	3.78	0.268	13.70	0.41
		8/16/2016	0.00	-52.0	6.34	0.818	14.95	0.22
		8/24/2017	10.30	-18.0	6.30	0.745	14.15	0.00
		8/21/2018	6.8	-49.0	6.35	0.709	14.77	0.71
OB-14B	25 - 35'	9/27/2006	1.80	-30.8	6.75	0.871	14.83	0.23
		4/9/2007	3.00	-12.9	6.69	0.954	14.00	0.28
		4/30/2008	14.70	6.8	6.76	0.852	14.01	0.24
		9/11/2008	12.30	-4.6	6.30	0.807	14.29	0.37
		7/6/2009	15.90	44.2	6.65	0.762	14.59	0.45
		10/20/2009	1.20	16.4	6.93	0.646	13.16	0.24
		5/28/2010	1.78	-17.9	6.62	0.709	13.61	0.31
		5/19/2011	29.10	-7.0	6.69	0.911	13.97	0.47
		4/18/2012	9.70	-30.0	7.07	0.950	13.45	1.20
		11/6/2013	16.80	-2.0	7.14	0.803	12.69	0.70
		9/11/2014	21.20	-83.0	6.81	0.797	14.13	0.97
		8/13/2015	0.00	-99.0	6.85	0.739	13.25	1.13
		5/23/2016	3.03	38.0	4.07	0.285	13.81	0.36
		8/15/2016	3.00	22.0	6.44	0.794	14.52	0.00
		2/2/2017	6.70	-16.0	7.07	0.833	12.17	0.44
		8/24/2017	1.00	-49.0	6.99	0.754	13.74	0.13
		8/21/2018	9.00	-32.0	6.95	0.762	13.57	0.38
OB-15B	25 - 35'	10/3/2006	38.90	34.8	8.21	0.199	13.03	0.16
		4/12/2007	147.00	171.1	7.87	0.212	5.38	0.32
		5/2/2008	11.00	32.1	7.89	0.186	9.91	0.28
		9/16/2008	6.10	157.6	7.60	0.171	16.03	0.92
		7/2/2009	13.30	-53.3	7.03	0.158	15.77	0.12
		10/26/2009	13.80	NR	7.82	0.135	13.48	1.86
		6/3/2010	3.95	76.6	6.18	0.158	20.12	0.63
		5/23/2011	2.00	77.0	7.65	0.204	13.59	1.53
		4/24/2012	0.00	135.0	7.38	0.196	14.84	0.88
		11/20/2013	44.50	90.0	7.62	0.171	9.57	2.06
		9/5/2014	29.10	-8.0	7.93	0.202	14.66	0.91
		8/24/2015	44.80	-13.9	8.09	0.173	14.80	0.01
		8/17/2016	42.90	-28.0	7.73	0.153	19.78	2.03
		8/16/2017	8.30	-54.0	8.06	0.171	13.76	0.57
		8/22/2018	22.30	-133.0	8.01	0.172	13.80	0.00
OB-16	5 - 15'	9/27/2006	0.80	-44.7	6.59	0.955	15.02	0.82
		4/10/2007	2.80	-20.6	6.63	0.985	8.65	0.32
		5/1/2008	0.00	-66.1	6.39	0.914	10.50	0.21
		9/11/2008	4.27	-41.6	6.21	0.960	15.43	0.38
		7/8/2009	1.07	-33.4	6.69	0.795	13.21	0.47
		10/23/2009	1.67	-39.8	6.36	0.762	12.87	0.92
		5/27/2010	6.85	-92.7	6.46	0.768	12.07	0.16
		5/19/2011	15.80	77.0	5.39	0.997	12.02	0.73
		4/17/2012	25.70	-66.0	6.87	1.020	14.80	1.76

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2018)

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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
		11/6/2013	0.00	-64.0	6.79	1.000	13.42	2.40
		9/10/2014	0.00	-87.0	6.66	0.944	14.70	1.30
		8/13/2015	11.30	-61.0	6.45	0.915	16.00	1.56
		5/23/2016	7.62	24.3	4.00	0.719	11.80	0.20
		8/16/2016	0.00	-66.0	5.72	1.020	15.79	4.19
		2/3/2017	32.40	-54.0	6.94	0.871	8.16	0.65
		8/24/2017	11.70	-56.0	6.63	0.978	15.58	0.00
		8/21/2018	6.90	-40.0	6.39	0.942	15.72	1.45
		9/27/2006	6.20	18.2	6.39	0.612	15.01	0.66
		4/10/2007	9.00	114.1	6.44	0.656	6.45	0.50
		5/1/2008	0.80	45.4	6.19	0.575	9.44	0.57
		9/11/2008	1.64	368.6	6.01	0.181	15.92	1.04
		7/8/2009	10.00	17.0	6.52	0.571	12.81	0.61
		10/23/2009	12.30	37.3	6.49	0.564	12.59	0.33
		5/27/2010	7.45	4.8	6.37	0.521	11.18	0.18
		5/19/2011	0.00	35.0	6.12	0.192	11.85	0.91
OB-17	3 - 13'	4/17/2012	21.70	-12.0	6.76	0.797	10.20	1.56
		11/6/2013	15.30	89.0	6.54	0.739	11.59	1.70
		9/3/2014	90.00	-26.0	6.91	0.777	16.30	1.83
		8/13/2015	45.00	-8.0	6.42	0.647	15.45	0.00
		5/24/2016	22.10	-54.1	4.90	0.522	10.70	0.52
		8/16/2016	1.60	10.0	5.77	0.711	15.04	5.49
		2/2/2017	15.00	135.0	6.70	0.648	7.12	1.51
		8/24/2017	15.50	4.0	6.62	0.62	18.19	2.28
		8/21/2018	7.10	23.0	6.28	0.673	16.01	0.087
		9/26/2006	0.36	57.6	6.74	0.262	14.45	2.99
		4/10/2007	1.00	150.3	6.88	0.357	6.65	2.39
		5/1/2008	0.41	53.2	6.67	0.296	8.90	1.70
		9/11/2008	3.59	195.4	5.31	0.276	13.87	2.48
		7/8/2009	17.70	216.7	6.65	0.241	11.84	0.65
		10/23/2009	3.57	38.3	6.94	0.244	12.30	3.24
		5/27/2010	3.53	106.2	6.94	0.231	10.19	2.45
		5/16/2011	0.00	204.0	5.84	0.605	8.69	0.92
OB-18	10 - 20'	4/17/2012	0.20	87.0	7.13	0.365	10.84	2.21
		11/6/2013	0.00	170.0	6.80	0.356	13.92	1.98
		9/3/2014	1.90	192.0	6.71	0.352	12.32	0.59
		8/13/2015	22.80	118.0	6.72	0.33	11.68	0.66
		5/23/2016	3.09	230.2	6.93	0.249	10.80	1.14
		8/16/2016	3.50	265.0	6.86	0.272	13.33	5.56
		8/24/2017	29.00	146.0	6.87	0.372	12.30	0.78
		8/21/2018	7.00	204.0	6.71	0.272	12.34	2.88
		10/3/2006	10.10	-61.3	6.36	0.254	14.32	0.13
		4/9/2007	2.00	-40.7	6.22	0.160	6.23	0.18
		10/15/2007	NR	-52.7	6.60	NR	NR	6.22
		4/29/2008	0.00	-66.2	6.05	0.100	9.30	0.19
		9/12/2008	6.32	-16.5	5.91	0.193	14.15	0.28
		7/7/2009	12.00	-58.2	5.63	0.215	11.60	0.27
		10/27/2009	2.70	-87.1	6.35	0.157	12.43	0.19
		6/11/2010	5.85	-62.7	6.27	0.100	10.67	0.18
		5/20/2011	0.00	-23.0	6.16	0.190	10.70	1.67
OB-19	5 - 20'	5/25/2012	0.00	-50.0	6.23	0.161	10.14	0.80
		11/11/2013	49.80	-38.0	6.34	0.127	12.25	2.58
		9/4/2014	1.70	-89.0	5.81	0.217	14.48	3.44
		8/5/2015	11.40	-86.0	6.37	0.138	17.10	6.00

Table 4A
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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
		5/25/2016	2.88	185.8	6.30	0.187	11.00	6.45
		8/17/2016	17.90	-8.0	5.38	0.172	16.97	0.88
		2/3/2017	6.80	-7.0	6.36	0.193	7.10	0.00
		8/25/2017	15.40	-52.0	6.53	0.15	14.12	0.00
		8/22/2018	4.90	-20.0	6.12	0.185	13.38	0.12
		10/4/2006	98.70	28.9	5.61	0.388	14.65	0.17
		4/3/2007	21.00	-86.9	6.27	0.467	11.61	0.30
		10/11/2007	NR	-75.1	6.50	NR	NR	1.20
		4/29/2008	34.00	-44.2	6.26	0.221	6.64	0.33
		9/15/2008	32.10	20.1	4.93	0.234	13.49	3.05
		7/9/2009	9.90	-13.0	6.00	0.200	10.19	0.26
		10/28/2009	79.50	-24.4	5.96	0.217	12.96	0.73
		6/2/2010	5.74	-87.0	6.16	0.244	11.82	0.23
		5/18/2011	19.70	110.0	5.09	0.227	8.19	0.60
OB-20A	5 - 20'	4/27/2012	32.70	-26.0	6.15	0.208	10.22	0.78
		11/8/2013	41.00	-82.0	6.35	0.285	11.74	0.38
		9/5/2014	49.80	-141.0	5.78	0.299	12.98	0.85
		4/21/2015	12.80	-40.0	6.25	0.26	10.30	0.00
		6/1/205	5.00	-10.0	6.38	0.213	11.00	0.55
		8/5/2015	80.40	-83.0	6.30	0.251	11.47	0.00
		5/26/2016	1.70	-105.8	6.62	0.182	11.80	0.29
		8/18/2016	6.70	5.0	6.04	0.2	11.96	0.31
		8/29/2017	26.30	-54.0	6.29	0.301	11.38	2.58
		8/23/2018	10.20	14.0	6.10	0.204	13.26	0.24
		10/4/2006	197.00	-57.0	6.35	0.530	11.95	0.14
		4/5/2007	36.00	-50.4	6.27	0.527	10.28	0.20
		10/11/2007	NR	-51.7	6.34	NR	NR	0.35
		4/29/2008	20.00	-42.7	6.14	0.299	8.94	0.27
		9/15/2008	22.90	89.6	4.03	0.374	11.00	0.00
		7/9/2009	12.90	19.7	6.21	0.304	9.93	0.28
		10/28/2009	12.90	19.7	6.21	0.304	9.93	0.28
		6/2/2010	10.40	-29.4	6.93	0.215	12.40	0.43
		5/18/2011	28.20	-63.0	6.45	0.355	9.45	1.42
OB-20B	24 - 34'	4/27/2012	11.90	-42.0	6.46	0.385	13.30	1.04
		11/8/2013	20.70	-65.0	6.16	0.520	11.22	4.11
		9/5/2014	24.60	-71.0	6.38	0.436	13.54	4.47
		4/21/2015	25.10	-41.0	6.15	0.555	11.70	0.00
		6/1/2015	27.90	-51.0	6.10	0.484	10.05	0.00
		8/5/2015	25.30	-67.0	5.64	0.478	12.50	0.00
		5/26/2016	19.70	-38.9	6.31	0.383	11.00	0.31
		8/18/2016	6.30	-44.0	6.30	0.538	11.81	5.88
		2/3/2017	7.10	-41.0	6.26	0.629	6.31	0.35
		8/29/2017	15.90	-61.0	6.26	0.481	11.64	0.00
		8/23/2018	4.1	-38.0	11.27	0.394	12.1	0.01
		10/5/2006	74.70	132.9	5.96	0.123	15.66	0.64
		4/9/2007	816.00	32.6	6.42	0.101	7.38	5.83
		10/15/2007	NR	239.8	5.19	NR	NR	3.15
		4/29/2008	60.00	48.1	6.17	0.088	8.95	5.43
		9/12/2008	160.00	485.0	5.68	0.107	12.74	6.65
		7/7/2009	173.00	147.4	5.58	0.08	11.96	5.62
		10/27/2009	29.00	-12.8	6.46	0.082	12.30	3.43
		6/1/2010	205.00	219.3	5.92	0.008	12.60	4.17
OB-21	6 - 21'	5/18/2011	39.95	244.0	6.01	0.110	11.25	8.49
		4/24/2012	52.40	238.0	5.72	0.113	9.37	1.99

Table 4A
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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
		11/7/2013	49.80	201.0	6.48	0.124	12.67	1.14
		9/4/2014	NR	195.0	8.14	0.121	14.50	2.48
		4/20/2015	108.00	201.0	5.94	0.105	9.42	0.00
		8/6/2015	202.00	76.0	6.28	0.113	12.54	2.51
		8/18/2016	40.50	241.0	6.08	0.111	14.18	2.46
		8/30/2017	43.90	250.0	6.32	0.12	11.99	2.21
		8/22/2018	64.5	194.0	6.24	0.102	18.09	2.64
		11/29/2006	NR	-129.0	6.30	0.423	11.82	5.10
		4/4/2007	NR	32.6	6.42	0.313	7.94	5.83
		5/1/2008	63.00	225.3	5.99	0.345	9.87	8.57
		9/12/2008	NR	NR	NR	NR	NR	NR
		7/8/2009	222.00	347.4	6.12	0.266	15.12	4.47
		10/26/2009	NR	NR	NR	NR	NR	NR
		5/28/2010	21.50	203.3	5.83	0.237	13.50	6.41
OB-22	10 - 20'	5/19/2011	98.00	98.2	6.38	0.536	16.69	4.99
		11/5/2013	NS	NS	NS	NS	NS	NS
		9/5/2014	NS	NS	NS	NS	NS	NS
		8/18/2015	NS	NS	NS	NS	NS	NS
		8/17/2016	NS	NS	NS	NS	NS	NS
		2/2/2017	10.50	177.0	6.39	0.31	8.83	8.00
		8/16/2017	NS	NS	NS	NS	NS	NS
		8/21/2018	6.60	235.0	6.02	0.321	15.67	7.21
		11/28/2006	8.24	-62.7	6.44	1.118	14.70	0.27
		4/12/2007	NR	NR	NR	NR	NR	NR
		5/2/2008	8.70	-60.0	6.62	2.4	12.75	0.46
		9/12/2008	NR	NR	NR	NR	NR	NR
		7/8/2009	19.80	-35.3	6.34	0.969	14.92	1.02
		10/26/2009	NR	NR	NR	NR	NR	NR
OB-23	10 - 20'	5/28/2010	4.57	-25.7	5.69	0.897	14.43	0.42
		5/19/2011	0.00	-85.0	6.28	1.18	12.70	0.69
		11/5/2013	NS	NS	NS	NS	NS	NS
		9/5/2014	NS	NS	NS	NS	NS	NS
		8/18/2015	NS	NS	NS	NS	NS	NS
		8/18/2016	NS	NS	NS	NS	NS	NS
		8/16/2017	NS	NS	NS	NS	NS	NS
		8/21/2018	7.40	-111.0	6.37	0.900	15.12	4.57
		11/28/2006	3.97	143.5	7.09	0.701	11.64	0.25
		4/11/2007	5.10	90.0	7.24	0.840	7.76	0.25
		4/30/2008	5.30	45.5	7.07	0.780	9.08	0.27
		9/11/2008	33.90	244.4	5.28	0.738	15.49	0.87
		7/8/2009	9.80	401.4	6.57	0.588	13.32	0.35
		10/26/2009	6.40	117.4	6.91	0.574	14.03	0.4
		5/28/2010	5.75	131.5	6.92	0.477	10.95	0.27
		5/19/2011	30.90	85.0	7.05	0.774	11.73	0.99
OB-24	5 - 15'	4/18/2012	26.60	175.0	7.39	0.812	9.63	1.07
		11/6/2013	20.00	189.0	7.37	0.773	12.33	0.69
		9/3/2014	0.00	128.0	7.61	0.82	13.45	10.40
		8/13/2015	27.20	-35.0	7.27	0.688	13.85	3.55
		5/24/2016	38.70	-97.1	5.68	0.626	10.60	0.66
		8/16/2016	7.90	47.0	7.23	0.731	14.77	0.31
		8/17/2017	24.60	164.0	7.16	0.69	13.83	0.57
		8/22/2018	1.20	141.0	7.13	0.700	15.34	0.20
		11/28/2006	3.97	143.5	7.09	0.701	11.64	0.25
		4/12/2007	NR	NR	NR	NR	NR	NR

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2018)

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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-25	10 - 20'	4/29/2008	550.00	204.3	7.13	0.623	8.70	10.49
		9/18/2008	300.00	119.7	6.75	0.587	16.67	7.42
		7/6/2009	284.00	411.8	6.26	0.484	14.43	7.20
		10/26/2009	450.00	201.7	6.91	0.387	13.04	6.25
		6/1/2010	797.00	166.5	6.60	0.539	13.69	4.27
		5/20/2011	0.00	170.0	6.95	0.505	13.94	8.09
		4/20/2012	24.10	135.0	7.39	0.652	12.10	6.84
		11/11/2013	0.00	74.0	6.96	0.422	6.97	3.17
		9/9/2014	44.10	182.0	6.68	0.563	16.17	2.20
		8/6/2015	0.00	117.0	6.87	0.449	14.57	4.32
		8/18/2016	65.30	180.0	6.82	0.653	17.49	4.35
		2/6/2017	38.70	73.0	7.55	0.698	8.92	7.86
		8/18/2017	61.90	166.0	6.91	0.648	16.46	4.39
		8/21/2018	35.0	167.0	6.77	0.646	17.88	4.95
OB-26	9 - 24'	5/9/2008	9.00	167.0	5.45	0.065	8.82	6.03
		9/16/2008	9.96	305.7	5.49	0.135	15.99	3.86
		7/2/2009	8.70	146.4	6.12	0.079	14.09	1.77
		10/27/2009	16.40	156.9	5.57	0.066	14.60	2.28
		5/26/2010	10.30	232.4	4.63	0.052	12.90	3.95
		5/17/2011	0.00	192.0	5.96	0.077	11.01	8.12
		11/5/2013	NS	NS	NS	NS	NS	NS
		9/5/2014	NS	NS	NS	NS	NS	NS
		8/18/2015	NS	NS	NS	NS	NS	NS
		8/18/2016	NS	NS	NS	NS	NS	NS
		8/16/2017	NS	NS	NS	NS	NS	NS
		8/22/2018	NS	NS	NS	NS	NS	NS
OB-27	24.5 - 39.5'	6/2/2010	4.39	-75.9	6.29	0.300	11.51	0.31
		5/18/2011	40.20	-106.0	6.76	0.368	11.46	0.79
		4/25/2012	48.90	41.0	5.32	0.379	10.33	0.28
		11/11/2013	23.10	-94.0	6.38	0.440	11.12	0.37
		9/10/2014	44.70	-102.0	6.66	0.307	21.73	0.68
		4/21/2015	107.00	-82.0	6.50	0.440	11.11	0.00
		6/1/2015	27.20	-97.0	6.53	0.391	10.34	2.65
		8/6/2015	23.00	-87.0	6.93	0.362	13.48	0.65
		5/25/2016	17.90	-147.5	6.70	0.288	11.00	1.95
		8/17/2016	39.80	-78.0	6.12	0.357	16.39	0.15
		2/2/2017	34.70	-62.0	6.62	0.449	7.21	0.34
		8/22/2017	36.40	-93.0	6.62	0.353	15.75	4.19
		8/22/2018	40.8	-65.0	6.61	0.343	16.47	0.11
OB-28	3 - 18'	5/27/2010	4.39	-75.9	6.29	0.300	11.51	0.31
		5/19/2011	20.60	27.0	6.65	0.939	11.41	0.48
		4/17/2012	29.60	91.0	7.02	1.010	12.20	1.14
		11/6/2013	39.10	75.0	6.88	1.030	12.69	2.10
		9/10/2014	46.50	28.0	6.76	0.918	14.81	2.44
		8/13/2015	43.00	33.0	6.69	0.892	13.07	0.00
		5/23/2016	15.80	167.6	7.01	0.709	10.90	0.20
		8/15/2016	42.50	74.0	6.50	1.020	15.13	3.96
		8/24/2017	37.30	32.0	6.73	1.050	13.51	0.00
		8/21/2018	44.8	-9.0	6.79	1.010	13.65	2.28
OB-29	18 - 35'	5/11/2012	46.50	123.0	6.77	0.157	12.82	1.30
		11/14/2013	49.30	161.0	6.52	0.135	12.43	7.59
		9/9/2014	47.60	228.0	5.95	0.132	12.85	3.81
		8/12/2015	29.40	37.0	6.49	0.111	12.53	9.50
		8/16/2016	5.00	316.0	6.99	0.124	13.17	10.18

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2018)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
		8/18/2017	46.30	1.8	6.50	0.121	12.23	2.05
		8/22/2018	22.9	216.0	6.39	0.121	14.92	2.72
		5/10/2012	0.00	49.0	6.64	0.391	11.21	8.37
		11/5/2013	NS	NS	NS	NS	NS	NS
		9/5/2014	NS	NS	NS	NS	NS	NS
OB-30A	8 - 18'	8/18/2015	NS	NS	NS	NS	NS	NS
		8/17/2016	NS	NS	NS	NS	NS	NS
		8/16/2017	NS	NS	NS	NS	NS	NS
		8/24/2018	1.1	199.00	6.11	0.263	12.83	2.28
		5/11/2012	0.00	86.0	6.57	0.390	11.72	1.03
		11/7/2013	0.00	103.0	6.28	0.313	12.49	1.59
		9/4/2014	31.40	66.0	6.44	0.326	15.48	3.56
OB-30B	21 - 36'	8/6/2015	50.30	234.0	5.26	0.283	11.34	0.00
		8/17/2016	23.30	238.0	5.98	0.356	13.55	0.11
		8/25/2017	14.90	42.0	6.23	0.284	11.39	0.00
		8/22/2018	7.90	199.0	5.86	0.237	12.04	0.47
		5/9/2012	38.90	-27.0	8.07	0.425	13.38	0.89
		11/7/2013	49.80	79.0	9.03	0.410	12.15	2.22
		9/4/2014	30.20	125.0	8.20	0.386	15.76	3.71
OB-30C	40 - 50'	8/6/2015	0.00	-130.0	8.52	0.366	12.26	8.51
		8/17/2016	39.80	186.0	8.30	0.389	13.60	1.87
		8/25/2017	105.00	-55.0	8.13	0.364	16.12	0.54
		8/23/2018	48.2	-46.0	8.09	0.362	16.29	0.20
		8/17/2016	41.00	-76.0	6.41	0.301	13.49	6.44
OB-31	23 - 33'	2/6/2017	35.00	-102.0	6.98	0.307	9.77	0.00
		8/25/2017	30.30	-92.0	6.70	0.286	11.32	0.00
		8/22/2018	39.80	-103.0	6.66	0.252	13.15	0.71
		8/17/2016	12.60	-103.0	6.66	0.455	14.11	0.53
OB-32	10 - 20'	2/2/2017	8.30	3.0	6.18	0.308	8.88	2.49
		8/17/2017	8.70	-99.0	6.61	0.395	15.63	0.03
		8/22/2018	0.00	-122.0	6.71	0.361	11.65	6.83
		8/17/2016	9.40	299.0	6.41	0.132	13.76	9.38
OB-33	66 - 76'	8/17/2017	41.00	166.0	6.23	0.118	13.34	4.44
		8/22/2018	23.0	145.0	6.82	0.136	13.9	5.48
		10/5/2006	0.40	-313.3	7.45	0.759	13.30	0.06
		4/11/2007	11.70	-18.7	5.97	0.304	8.62	0.26
		10/16/2007	NR	-42.3	6.05	NR	NR	0.26
		4/30/2008	0.00	-74.2	5.99	0.215	6.18	0.10
		9/6/2008	3.40	-73.7	5.23	0.235	10.88	1.05
		7/9/2009	14.10	49.1	5.97	0.198	14.03	0.42
		10/28/2009	20.80	-53.8	5.22	0.154	14.39	0.53
		6/2/2010	69.10	59.2	6.82	0.674	12.19	0.13
		5/18/2011	0.00	-43.0	6.33	0.176	9.93	2.07
SC-1	64.4 - 70.9'	4/27/2012	0.00	-29.0	6.30	0.445	10.27	1.47
		11/11/2013	36.10	25.0	6.24	0.387	11.14	2.30
		9/5/2014	0.00	-45.0	5.82	0.213	14.30	1.27
		4/22/2015	23.50	-15.0	5.95	0.471	9.75	0.00
		6/2/2015	92.40	-17.0	5.71	0.41	8.86	14.89
		8/4/2015	30.30	-31.0	5.83	0.394	17.07	0.31
		5/26/2016	7.45	-83.1	6.36	0.321	19.10	0.99
		8/19/2016	13.40	-15.0	5.87	0.464	14.92	0.00
		8/16/2017	36.60	13.0	5.74	0.431	12.94	0.07
		8/24/2018	30.90	5.0	6.06	0.264	18.93	0.33
		5/5/2008	46.00	-20.7	6.36	0.600	20.03	0.84

Table 4A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2018)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
SC-2	47 - 67'	9/17/2008	16.00	-9.1	5.96	0.553	15.92	1.95
		6/30/2009	32.80	166.1	6.17	0.519	16.34	0.73
		10/20/2009	26.40	-108.2	6.50	0.317	13.63	0.49
		5/25/2010	6.10	132.9	6.27	0.321	15.79	0.62
		5/16/2011	59.20	237.0	6.05	0.571	14.00	3.25
		4/19/2012	0.00	155.0	6.69	0.465	13.92	1.14
		11/15/2013	25.90	53.0	6.34	0.508	12.44	0.69
		9/15/2014	0.00	318.0	6.51	0.476	14.57	1.22
		8/12/2015	23.60	136.7	6.47	0.474	13.90	0.79
		8/17/2016	41.80	374.0	5.91	0.492	14.85	0.28
		8/22/2017	10.30	110.0	6.47	0.393	16.79	2.84
		8/23/2018	33.40	170.0	6.63	0.564	14.41	1.48

Notes:

ORP (mV) = Oxidation Reduction Potential measured in millivolts

pH = Measured in Standard Units

Spec Cond (mmhos/cm) = Specific Conductivity measure in millimhos per centimeter

DO (mg/L) = Dissolved Oxygen measured in milligrams per Liter

NR = No Parameters were recorded.

NTU = Nephelometric Turbidity Units

NS = Not Sampled

SU = Standard Units

* Wells OB-1 through OB-7 were completed as bedrock wells due to thin overburden deposits.

Geochemical parameters reported at time of sampling.

Table 4B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2018)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-1	11-31'	10/6/2006	36.00	221.4	5.68	72	17.24	7.08
		4/17/2007	0.60	242.4	5.72	36	8.83	6.80
		5/6/2008	7.20	149.4	5.27	0.037	11.59	7.47
		9/18/2008	7.70	352.0	5.62	0.085	12.76	6.79
		7/17/2009	0.39	257.1	5.71	0.045	12.73	6.16
		10/20/2009	0.00	120.3	5.73	0.056	11.61	2.52
RW-1	59-79'	4/18/2007	1.10	216.1	5.98	42	10.62	7.13
		5/6/2008	6.90	22.0	6.56	0.131	12.39	5.75
		9/19/2008	1.70	112.4	7.04	0.247	10.35	2.91
		7/17/2009	0.34	-19.4	7.30	0.161	14.01	1.48
		10/20/2009	0.00	-104.2	7.54	0.153	11.98	2.03
		6/30/2010	0.09	-101.4	7.50	0.150	12.97	2.04
RW-1	64-74'	5/26/2011	NR	NR	NR	NR	NR	NR
		4/17/2012	0.00	-91.0	8.70	0.230	21.64	13.74
		8/18/2015	NR	NR	NR	NR	NR	NR
		8/17/2016	NR	NR	NR	NR	NR	NR
RW-1	98-118'	10/10/2006	3.40	53.8	7.66	218	13.52	7.34
		4/18/2007	2.20	146.7	7.93	200	10.67	2.03
		5/7/2008	1.30	-31.3	7.62	0.201	11.01	2.93
		9/19/2008	1.30	272.9	7.81	0.260	10.96	3.72
		7/17/2009	0.30	-61.7	7.37	0.171	13.75	0.33
		10/20/2009	0.70	-95.6	7.41	0.158	12.21	0.63
RW-1	126-146'	4/18/2007	5.00	13.0	7.93	199	10.97	1.73
		5/7/2008	0.20	-96.9	7.39	0.203	12.40	2.09
		9/22/2008	1.70	-12.4	7.68	0.272	10.66	1.88
		7/17/2009	1.47	-60.1	6.84	0.195	13.51	0.28
		10/20/2009	1.50	-98.9	6.27	0.261	12.14	0.33
		6/30/2010	1.20	-99.6	6.24	0.268	12.12	0.31
RW-1	131-141'	5/26/2011	0.00	0.1	6.70	0.428	15.07	7.60
		4/17/2012	0.00	-22.0	6.75	0.613	15.84	18.03
		8/18/2015	NR	NR	NR	NR	NR	NR
		8/17/2016	NR	NR	NR	NR	NR	NR
RW-2	20-50'	10/4/2006	9.60	153.9	6.13	0.869	16.89	36.80
		4/10/2007	2.30	119.2	6.30	1.000	14.45	0.62
		5/1/2008	9.70	117.7	6.15	1.155	14.66	2.61
		9/16/2008	1.30	105.0	6.04	0.670	NR	NR
		7/10/2009	9.21	88.2	5.86	0.975	15.38	1.09
		10/26/2009	9.80	57.3	6.42	0.611	16.05	3.28
RW-2	103-133'	10/4/2006	12.30	12.3	6.59	0.941	16.79	34.10
		4/10/2007	41.70	105.8	6.42	2.000	12.48	1.01
		5/1/2008	7.60	149.1	6.30	1.209	14.37	0.72
		9/17/2008	2.50	634.8	2.70	1.004	14.31	0.31
		7/13/2009	5.29	50.5	6.19	1.062	17.14	0.59
		10/27/2009	6.00	34.3	6.61	0.566	14.19	2.10
RW-2	161-191'	4/16/2007	45.00	95.6	6.73	1340	11.71	2.42
		10/5/2006	25.00	1.2	6.65	361	15.44	44.70
		9/17/2008	NR	NR	NR	NR	NR	NR
		7/13/2009	3.02	47.8	6.34	1.054	17.14	0.63
		10/27/2009	4.80	-2.2	6.64	0.564	14.65	2.58
RW-2	279-289'	4/17/2007	29.00	115.7	6.84	1351	11.66	3.91
		9/11/2008	NR	NR	NR	NR	NR	NR
		7/13/2009	3.44	52.1	6.39	1.055	16.73	0.78
		10/27/2009	3.77	-16.8	6.64	0.596	14.24	2.10
		6/29/2010	3.89	-17.0	6.66	0.594	14.56	2.08
		5/24/2011	0.00	18.0	4.15	2.550	23.11	2.69
		5/8/2012	0.00	-89.0	11.45	14.690	12.18	15.32
		11/19/2013	7.10	-15.0	11.00	1.690	11.06	6.61
		9/26/2014	11.70	-163.0	11.64	1.050	17.1	12.10
		8/21/2015	0.00	-233.0	10.73	1.270	23.23	2.57
		8/22/2016	0.80	-79.0	11.37	2.160	19.62	9.25
		2/7/2017	33.80	-1.0	11.40	1.110	7.64	15.98

Table 4B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2018)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
		8/23/2017	0.50	-63.0	-241.00	1.260	21.88	9.00
		8/28/2018	0.0	-91.0	9.13	1.080	22.66	8.99
		4/17/2007	9.00	76.4	6.73	1942	37.02	0.13
		5/5/2008	24.00	-61.6	6.61	2.639	22.10	2.14
		7/14/2009	0.32	98.8	5.64	2.494	11.32	0.71
RW-2	442-479'	10/28/2009	5.03	-55.9	6.93	2.272	13.85	1.06
		6/29/2010	NR	NR	NR	NR	NR	NR
		8/25/2015	0.00	-33.0	11.28	3.110	19.43	9.89
		2/7/2017	14.90	-9.0	11.60	2.540	8.52	12.73
		6/3/2011	NR	NR	NR	NR	NR	NR
		5/16/2012	0.00	-23.0	11.37	2.050	23.21	13.71
		11/19/2013	1.10	-92.0	11.34	2.970	11.58	4.10
RW-2	452-462'	9/26/2014	2.20	107.0	11.37	2.050	22.81	11.06
		8/22/2016	0.00	-83.0	11.29	1.340	19.75	9.77
		8/23/2017	2.80	-71.0	10.50	2.220	22.75	8.66
		8/28/2018	0.0	-30.0	9.86	1.880	22.75	1.60
		9/29/2006	0.80	29.0	7.35	0.457	12.74	38.30
		4/5/2007	200.00	-3.5	7.30	397	10.58	0.31
		4/30/2008	32.00	-112.2	7.23	0.404	11.77	0.49
RW-3	62-98'	9/8/2008	4.80	9.4	7.26	0.358	13.55	0.60
		7/6/2009	16.50	38.7	6.82	0.282	13.59	0.50
		10/19/2009	5.80	-34.8	7.27	0.243	11.60	0.37
		6/28/2010	14.60	28.7	6.78	0.249	12.89	0.48
		5/25/2011	0.00	148.0	5.51	0.222	21.88	1.83
		4/27/2012	0.00	-64.0	7.18	0.346	12.31	1.51
		11/11/2013	0.00	-27.0	10.28	0.302	11.52	17.00
		9/15/2014	0.00	65.0	10.53	0.393	18.47	13.62
RW-3	77-87'	8/6/2015	0.00	-26.0	5.89	0.384	16.79	2.40
		5/27/2016	1.80	-25.4	10.74	0.291	14.2	1.23
		8/24/2016	13.30	-80.0	7.17	0.445	15.4	9.43
		8/17/2016	12.00	-18.0	7.51	0.439	19.43	7.72
		8/30/2018	0.0	-9.0	7.14	0.512	19.05	8.82
		6/9/2010	29.20	-107.9	7.32	0.335	13.01	2.38
RW-3D	140-165'	5/24/2011	5.00	-152.0	7.36	0.471	14.86	1.13
		11/12/2013	0.00	-56.0	10.69	1.860	7.28	24.40
RW-3D	170-181'	6/9/2010	50.80	-122.6	7.43	0.332	12.56	0.85
		5/24/2011	5.00	-165.0	7.29	0.476	15.25	1.00
		4/30/2012	0.00	-297.0	12.02	1.450	13.16	0.75
		11/12/2013	0.00	-18.0	8.27	0.457	8.30	25.24
		9/12/2014	0.00	127.0	7.55	0.339	14.66	16.63
		8/10/2015	11.20	-150.0	10.58	0.283	19.40	13.45
RW-3DD	175-180'	5/31/2016	4.50	-190.2	8.91	0.184	15.00	1.41
		8/23/2016	3.00	-112.0	9.92	0.274	21.66	8.65
		2/8/2017	4.20	-83.0	11.56	0.298	11.82	4.10
		8/17/2017	12.80	7.3	10.14	0.280	16.95	9.83
		8/30/2018	0.0	-12.0	9.48	0.209	18.94	9.35
		4/30/2012	0.00	-84.0	12.01	2.340	16.89	13.21
		11/12/2013	0.00	-56.0	10.69	1.860	7.28	24.40
		9/11/2014	0.00	69.0	10.29	1.330	17.00	14.32
		8/25/2015	8.00	-84.0	10.40	1.640	19.65	1.61
RW-3DS	155-160'	5/27/2016	2.30	-237.0	10.05	0.293	17.80	2.90
		8/25/2016	20.10	-124.0	11.02	1.340	20.25	5.71
		2/8/2017	4.00	-121.0	10.78	1.100	10.53	13.30
		8/17/2017	24.00	10.0	10.67	1.050	18.57	4.20
		8/30/2018	0.0	-58.0	10.2	0.971	19.49	9.10
RW-4A	62-77'	6/25/2010	0.28	83.2	6.89	0.102	11.27	6.53
		5/25/2011	0.00	169.0	5.98	0.175	17.95	NR
		4/25/2012	0.00	20.0	9.69	0.157	13.69	15.05
		11/18/2013	2.40	147.0	6.72	0.105	9.30	7.35
RW-4A	62-72'	9/10/2014	0.00	118.0	7.78	0.119	19.35	10.70

Table 4B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2018)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-4A	82-92	8/10/2015	1.35	51.0	7.40	0.094	18.52	14.75
		8/25/2016	6.80	-40.0	6.97	0.113	14.57	10.81
		8/22/2017	4.60	5.0	6.95	0.117	20.69	8.64
		8/30/2018	2.7	86.0	6.8	0.140	20.05	3.25
RW-4A	113-123'	6/25/2010	0.67	175.3	9.12	0.187	11.23	2.11
		5/25/2011	0.00	177.0	6.28	0.230	13.52	NR
		4/25/2012	0.00	68.0	8.07	0.160	12.20	14.82
		11/8/2013	1.50	145.0	6.86	0.146	7.22	12.78
		9/10/2014	0.00	177.0	7.36	0.134	18.03	10.96
		8/24/2015	0.00	194.0	6.75	0.126	15.04	11.11
		8/24/2016	4.90	154.0	7.65	0.140	15.92	11.11
		8/16/2017	3.50	192.0	6.97	0.147	18.21	6.21
		8/31/2018	0.0	101.0	6.68	0.134	18.10	9.62
RW-4	57-77'	10/2/2006	825.00	177.0	6.60	0.232	12.64	36.40
		4/6/2007	NR	44.8	7.01	112	5.29	1.61
		4/28/2008	10.00	122.0	6.65	0.114	12.87	3.47
		9/15/2008	16.00	-1.4	6.76	0.123	14.78	4.23
		6/30/2009	26.20	394.7	6.65	0.087	12.91	1.87
		10/21/2009	24.00	41.7	6.52	0.088	12.05	4.84
RW-4	108-128'	10/2/2006	3.41	217.2	6.82	0.289	12.37	57.10
		4/9/2007	NA	133.1	7.02	139	10.62	4.50
		4/29/2008	6.80	189.7	7.01	0.144	10.85	6.31
		9/16/2008	NR	121.6	6.50	0.145	11.31	5.85
		6/30/2009	20.50	145.8	6.60	0.096	12.96	3.46
		10/22/2009	16.00	68.9	6.68	0.099	11.74	4.89
RW-4	328-348'	10/3/2006	19.00	206.6	6.74	0.263	11.99	84
		4/9/2007	NR	142.8	6.75	119	10.96	5.09
		4/29/2008	NR	135.7	6.71	0.123	10.9	7.90
		9/9/2008	NR	160.6	6.91	0.137	14.19	7.08
		7/2/2009	22.90	267.8	6.61	0.097	12.66	6.13
		10/23/2009	12.00	90.9	6.87	0.096	10.32	5.30
RW-4	333-343'	6/7/2011	0.00	39.0	11.34	1.310	18.87	3.25
		4/25/2012	0.00	-32.0	12.22	1.200	12.89	15.19
		11/11/2013	10.10	101.0	12.08	0.300	10.72	12.23
		9/9/2014	36.50	30.0	12.22	0.767	16.13	13.20
		8/24/2015	0.00	-15.0	11.40	0.532	16.1	10.90
		8/24/2016	8.30	-5.0	11.36	0.639	20.28	14.25
		8/25/2017	2.00	-49.0	11.61	0.487	14.7	10.18
		8/30/2018	0.0	-41.0	11.1	0.319	17.65	9.56
RW-4	388-408'	10/3/2006	18.50	270.9	6.79	0.265	12.72	87.30
		4/9/2007	6.30	142.4	6.77	119	10.20	5.31
		4/29/2008	14.00	226.6	6.52	0.125	11.47	28.44
		9/10/2008	7.90	172.9	5.88	0.122	11.63	6.93
		7/2/2009	30.20	338.9	6.35	0.091	13.14	7.19
		10/23/2009	14.00	16.4	6.83	0.092	10.81	5.55
		6/25/2010	0.84	143.4	9.16	0.160	11.27	2.88
RW-4	393-403'	5/25/2011	NR	NR	NR	NR	NR	NR
		4/26/2012	0.00	207.0	6.89	0.244	10.64	14.96
		11/11/2013	0.00	50.0	11.07	0.160	10.60	17.08
		9/10/2014	0.00	200.0	8.11	0.245	15.88	12.94
		8/10/2015	26.80	124.0	8.25	0.356	18.20	14.48
		8/24/2016	7.90	134.0	8.24	0.179	16.73	10.16
		8/25/2017	8.70	119.0	7.76	0.178	14.62	9.79
		8/30/2018	0.0	89.0	7.09	0.166	17.62	1.42
RW-5	40-51'	9/26/2006	77.90	-99.0	7.15	0.261	10.20	41.50
		4/13/2007	59.30	-108.7	7.25	500.000	5.57	1.94
		7/7/2009	NR	-71.4	6.76	NR	NR	0.20
RW-5	64-75'	9/28/2006	73.90	238.9	6.77	0.464	12.41	0.34
		4/12/2007	41.50	-56.6	7.88	254	7.55	7.26
		10/4/2006	22.90	292.3	7.22	0.774	11.25	65.60
		9/28/2006	-5.70	376.6	6.51	0.147	19.73	66.00

Table 4B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2018)

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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-5	100-120'	4/12/2007	20.60	-88.9	7.10	518	11.04	0.21
		10/15/2007	NR	-92.3	7.08	NR	NR	4.66
		5/2/2008	6.80	-86.6	6.67	0.741	9.20	0.39
		7/7/2009	1.30	-71.4	6.76	0.390	11.00	0.20
		9/17/2008	3.28	-82.1	6.45	0.615	12.96	1.47
		10/27/2009	8.80	-96.7	6.77	0.414	11.66	1.09
		6/1/2010	1.96	-97.3	7.60	0.375	12.06	0.59
RW-5	99-119'	5/20/2011	0.00	-153.0	7.32	0.815	9.05	0.67
		4/26/2012	0.00	-172.0	8.01	0.444	9.39	2.91
		11/14/2013	14.70	-74.0	10.14	0.429	10.66	7.97
		9/4/2014	41.00	-139.0	10.92	0.651	16.62	8.16
		8/5/2015	46.20	-283.0	10.62	0.472	15.75	5.10
		5/25/2016	12.80	-24.4	11.32	0.478	12.1	0.89
		8/18/2016	33.80	-89.0	10.89	0.640	13.82	0.76
		2/3/2017	48.80	-254.0	11.28	0.645	6	6.80
		8/30/2017	30.10	-39.0	11.41	0.967	16.91	0.48
		8/24/2018	19.1	-124.0	11.58	1.050	17.43	0.72
RW-5A	58-78'	10/15/2007	NR	178.9	7.79	NR	NR	3.87
		4/29/2008	0.20	-23.3	10.94	0.778	10.25	0.22
		9/12/2008	8.90	73.5	5.37	0.457	NA	0.96
		7/7/2009	12.40	-219.2	8.24	0.775	11.09	0.06
		10/28/2009	0.00	-167.2	8.89	0.564	11.41	0.24
		6/1/2010	3.05	48.5	8.45	0.995	12.29	0.23
RW-5A	54-74'	5/18/2011	52.40	-139.0	7.81	0.406	11.05	1.06
		4/25/2012	30.20	106.0	5.10	0.528	11.24	0.63
		11/18/2013	48.90	14.0	6.05	0.890	11.01	2.09
		9/10/2014	21.70	-19.0	6.39	0.789	15.88	0.99
		8/24/2015	36.80	-24.0	6.12	0.589	11.89	0.00
		5/25/2016	6.82	-15.8	7.00	0.457	14.1	1.55
		8/18/2016	17.60	18.0	6.01	0.440	17.54	1.00
		8/23/2017	35.30	-39.0	6.96	0.310	13.45	0.53
		8/22/2018	14.20	-18.0	6.99	0.298	15.59	0.32
RW-6	10-20'	5/2/2008	4.00	-98.9	6.62	0.755	9.11	0.22
RW-6	53-64'	9/27/2006	7.60	-70.5	6.09	0.381	16.38	39.00
		4/2/2007	6.40	-64.8	6.41	615	12.96	1.21
RW-6	70-81'	9/27/2006	4.00	-48.8	6.24	0.665	13.28	1.80
		4/3/2007	0.90	-60.5	6.41	652	11.47	0.32
RW-6	100-120'	10/9/2006	20.00	-36.0	6.55	666	11.32	6.56
		4/6/2007	NR	-61.2	6.46	616	9.19	0.44
		10/10/2007	NR	-27.6	6.17	NR	NR	0.76
		9/15/2008	3.00	-57.5	6.13	0.585	11.91	8.95
		7/9/2009	2.71	-6.9	6.40	0.491	10.71	0.37
		10/28/2009	1.56	-112.3	6.70	0.422	10.68	0.38
		6/2/2010	6.91	-48.0	6.91	0.400	12.26	0.43
RW-6	99-119'	5/18/2011	0.00	-82.0	6.63	0.554	10.30	2.37
		4/27/2012	20.70	-10.0	6.98	0.438	10.70	0.80
		11/18/2013	0.30	-72.0	6.44	0.564	11.73	8.30
		4/22/2015	5.30	-82.0	6.56	0.531	14.64	0.00
		6/2/2015	9.70	-65.0	6.38	0.486	9.17	0.00
		8/6/2015	17.90	-92.0	5.61	0.542	12.12	0.00
		5/26/2016	3.25	-124.7	6.55	0.443	12.50	0.52
		8/18/2016	0.00	-46.0	6.36	0.639	11.74	0.00
		2/3/2017	30.20	-53.0	6.34	0.709	7.72	0.12
		8/16/2017	5.90	-61.0	6.18	0.623	12.26	0.14
		8/23/2018	0.30	-40.0	6.32	0.621	11.27	0.00
RW-6A	54-74'	10/16/2007	NR	-27.9	6.36	NR	NR	3.24
		5/2/2008	3.11	-30.4	6.31	0.559	9.80	0.23
		9/15/2008	2.52	37.9	5.96	0.411	12.33	0.12
		7/9/2009	7.64	-14.1	6.62	0.446	10.69	0.44
		10/28/2009	1.00	-109.6	6.63	0.387	10.29	0.19
		6/2/2010	2.66	-39.9	6.21	0.485	11.23	0.21

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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-6A	58-78'	5/18/2011	0.00	27.0	5.70	0.520	9.71	1.60
		4/27/2012	0.00	-51.0	6.56	0.517	11.05	1.87
		11/8/2013	0.00	-44.0	6.24	0.634	10.88	5.21
		9/5/2014	43.20	-53.0	6.56	0.582	12.45	3.39
		4/21/2015	4.60	-33.0	6.23	0.677	10.55	0.00
		6/1/2015	0.00	-48.0	6.24	0.583	10.68	0.00
		8/4/2015	34.30	-43.0	5.69	0.619	17.01	0.35
		5/26/2016	2.24	-127.5	6.50	0.480	14.9	1.11
		8/18/2016	0.00	-28.0	6.36	0.696	12.16	0.63
		2/3/2017	0.00	-30.0	6.27	0.718	8.57	0.65
		8/29/2017	1.90	-28.0	6.33	0.651	11.51	5.63
		8/23/2018	1.30	-22.0	6.41	0.658	12.07	0.11
RW-7	34-45'	9/26/2006	24.60	189.8	6.46	0.135	13.36	6.38
		4/3/2007	55.00	334.0	4.43	115	12.21	4.45
RW-7	49-60'	9/26/2006	23.10	224.5	6.33	0.126	14.12	7.35
		4/4/2007	7.30	73.0	6.75	138	8.34	4.55
RW-7	80-100'	9/28/2006	1.10	217.6	6.62	0.136	13.43	74.00
		4/3/2007	5.70	150.0	6.66	118	11.52	5.69
RW-7	100-120'	9/28/2006	NR	376.6	6.51	NR	NR	66.00
		4/4/2007	1.90	218.6	6.78	132	8.66	5.12
		10/15/2007	NR	174.5	6.90	NR	NR	8.45
		5/5/2008	7.14	155.3	6.71	0.116	10.17	5.87
		9/12/2008	29.30	167.9	6.22	0.115	12.25	5.83
		7/7/2009	4.00	293.1	6.37	0.096	11.99	5.97
		10/27/2009	10.00	188.9	6.69	0.850	11.96	7.08
		6/1/2010	13.70	144.7	6.20	0.089	12.37	6.15
RW-7	99-119'	5/18/2011	0.00	92.0	6.67	0.121	11.99	4.96
		4/24/2012	0.00	182.0	6.54	0.107	13.39	3.26
		11/7/2013	0.00	193.0	7.59	0.133	11.07	7.03
		9/4/2014	0.00	154.0	5.82	0.312	13.11	7.03
		4/20/2015	12.00	197.0	6.22	0.102	10.91	0.00
		8/6/2015	49.80	-15.0	6.70	0.110	13.19	9.63
		8/18/2016	37.90	216.0	6.31	0.113	14.96	4.75
		8/30/2017	12.70	262.0	6.76	0.118	14.83	4.65
		8/22/2018	22.00	201.0	6.51	0.100	16.48	5.27
RW-8A	47-57'	5/2/2012	NR	NR	NR	NR	NR	NR
		8/18/2015	NR	NR	NR	NR	NR	NR
		8/25/2016	NR	NR	NR	NR	NR	NR
		8/16/2017	NR	NR	NR	NR	NR	NR
RW-8	42-62'	7/7/2009	3.11	108.4	5.53	0.166	14.92	3.69
		11/4/2009	0.00	120.5	5.81	0.145	12.98	3.70
RW-8	158-178'	7/7/2009	1.47	-60.1	6.87	0.469	18.29	0.82
		11/4/2009	0.00	-89.8	7.37	0.404	12.61	0.89
		6/23-628/2010	NR	NR	NR	NR	NR	NR
RW-8	163-173'	5/31-6/1/2011	0.00	12.0	6.79	0.320	21.30	1.73
		5/2-5/3/2012	0.00	4.0	9.93	0.621	13.22	15.98
		11/15/2013	0.00	53.0	8.03	0.664	13.51	12.82
		9/22/2014	5.50	-66.0	7.97	0.635	19.34	4.04
		8/18/2015	0.00	-16.0	7.63	0.493	19.89	9.75
		8/25/2016	0.10	-97.0	7.34	0.438	20.40	7.65
		8/21/2017	0.20	-95.0	7.30	0.500	20.15	6.81
		8/29/2018	0.0	-55.0	7.32	0.455	20.75	9.66
RW-8	199-219'	7/7/2009	2.11	-103.8	7.13	0.784	20.48	1.17
		11/4/2009	1.84	-102.5	7.20	0.582	12.91	1.27
		6/23-6/28/2010	NR	NR	NR	NR	NR	NR
RW-8	204-214'	5/31-6/1/2011	NR	NR	NR	NR	NR	NR
		5/2/2012	NR	NR	NR	NR	NR	NR
		11/14-11/15/13	4.70	98.0	8.52	1.240	11.38	12.58
		9/22-9/23/14	18.10	32.0	8.39	0.928	20.44	5.17
		8/19/15 - 8/20/15	NR	NR	NR	NR	NR	NR

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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
		8/25/2016	1.10	-65.0	8.88	0.849	22.2	9.36
		8/21/17 - 8/22/17	0.90	-68.0	8.80	0.855	21.8	8.95
		8/29/2018	0	-73	9.08	0.781	23.3	8.84
		5/31/2011	NR	NR	NR	NR	NR	NR
		4/20/2012	NR	NR	NR	NR	NR	NR
RW-9A	25-35'	8/20/2015	NR	NR	NR	NR	NR	NR
		8/29/2016	NR	NR	NR	NR	NR	NR
		8/16/2017	NR	NR	NR	NR	NR	NR
		6/23/2010	NR	NR	NR	NR	NR	NR
		6/1/2011	NR	NR	NR	NR	NR	NR
		4/20/2012	NR	NR	NR	NR	NR	NR
RW-9A	85-95'	9/23-9/24/14	0.00	-34.0	6.84	0.179	24.22	10.02
		8/20/15 - 8/21/15	NR	NR	NR	NR	NR	NR
		8/29/2016 - 8/30/16	4.80	-91.0	8.14	1.110	17.2	3.77
		8/16/2017	15.00	52.0	7.37	0.224	24.85	9.70
		8/29/2018	0.0	7.0	7.61	0.231	26.93	8.81
RW-9	20-40'	7/15/2009	0.23	385.1	6.48	0.153	14.72	8.13
		11/2/2009	0.10	90.4	6.27	0.122	11.82	6.03
RW-9	80-100'	7/15/2009	0.00	107.4	6.64	0.204	18.13	7.73
		11/2/2009	0.28	-62.4	7.22	0.288	13.75	2.51
		7/16/2009	5.90	-97.1	7.63	0.255	13.97	0.49
RW-9	134-154'	11/2/2009	0.32	-68.5	7.32	0.280	12.65	1.98
		5/26/2011	NR	NR	NR	NR	NR	NR
		4/19-4/20/2012	NR	NR	NR	NR	NR	NR
		8/19/15 - 8/20/15	NR	NR	NR	NR	NR	NR
RW-9	139'-149'	8/29/16 - 8/30/16	5.70	-80.0	8.29	1.090	16.36	4.05
		8/21/2017	NR	NR	NR	NR	NR	NR
		8/29/2018	0.0	17.0	6.84	1.080	20.47	8.95
		7/16/2009	4.11	-83.2	7.27	0.329	20.21	0.57
		11/3/2009	1.28	-93.6	7.41	0.281	11.70	2.79
RW-9	201-221'	6/23-6/28/2010	NR	NR	NR	NR	NR	NR
		5/26/2011	NR	NR	NR	NR	NR	NR
		4/20/2012	NR	NR	NR	NR	NR	NR
		11/19-11/20/2013	0.00	-161.0	8.76	0.970	9.90	6.20
		8/20/15 - 8/21/15	NR	NR	NR	NR	NR	NR
RW-9	206' 216'	8/29/16 - 8/30/16	1.00	-67.0	9.07	1.180	20.67	2.81
		8/16/17 - 8/17/17	1.60	105.0	8.63	0.950	25.00	10.45
		8/29/2018	0.00	70.00	8.44	1.09	22.05	9.08
RW-10	22-42'	7/8/2009	1.42	249.3	5.33	0.164	12.43	7.53
		10/29/2009	0.78	106.0	5.87	0.144	10.61	6.15
RW-10	46-66'	7/9/2009	3.11	169.5	6.06	0.176	10.96	4.90
		10/29/2009	1.46	89.3	5.78	0.144	36.98	6.04
		7/9/2009	6.10	154.9	5.99	0.175	12.02	5.23
RW-10	70-90'	10/29/2009	0.30	78.0	6.00	0.242	12.50	3.25
		11/14/2013	28.60	251.0	7.80	0.910	9.02	5.86
RW-10	115-135'	7/9/2009	5.72	209.6	6.04	0.175	13.25	1.67
		10/29/2009	0.58	47.1	6.15	0.254	12.27	1.82
		6/23-6/25/2010	NR	NR	NR	NR	NR	NR
		5/31-6/1/2011	NR	NR	NR	NR	NR	NR
		4/18-4/19/2012	0.00	-5.0	11.15	0.828	24.29	13.38
RW-10	120-130'	9/17/2014	4.10	102.0	11.77	0.878	18.30	13.12
		8/18/15 - 8/19/15	NR	NR	NR	NR	NR	NR
		8/29/2016	2.90	-145.0	11.87	0.712	17.87	2.54
		8/23/2017	0.40	-102.0	10.99	0.636	20.34	7.88
		8/28/2018	0.0	-20.0	10.73	0.571	16.84	10.90
RW-10	180-200'	7/9/2009	5.13	-8.0	7.03	0.335	12.73	0.96
		10/30/2009	1.93	-74.9	6.77	0.322	10.51	0.33
		6/23-6/28/2010	1.64	-73.2	6.75	0.320	11.47	0.30
		5/31/2011	0.00	-64.0	11.62	1.150	23.69	1.40
		4/17-5/4/2012	0.0/0.0	2.8	10.88/11.03	0.993/0.522	13.00/15.19	8.20/15.45

Table 4B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2018)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-10	185-195'	11/13/2013	8.00	-83.0	10.43	0.529	8.25	13.09
		9/17/2014	0.70	84.0	11.47	0.589	17.01	12.69
		8/18/2015	2.50	-41.0	11.13	0.517	16.99	1.61
		8/26/2016	0.00	-37.0	9.84	0.449	20.67	9.46
		8/22/2017	0.50	-6.0	9.38	0.364	20.64	4.21
		8/28/2018	0.0	41.0	10.03	0.374	16.05	10.93
RW-10A	51-61'	6/2/2011	0.00	36.0	6.72	0.467	18.46	0.76
		9/18/2014	1.80	64.0	7.72	0.531	18.74	10.56
		8/19/15 - 8/20/15	NR	NR	NR	NR	NR	NR
		8/29/2016	3.10	-122.0	7.94	0.561	20.39	9.70
		8/22/2017	NR	NR	NR	NR	NR	NR
		8/28/2018	0.0	53.0	7.58	0.511	22.06	3.12
RW-10A	75-85'	6/23-6/28/2010	36.00	72.3	7.40	0.271	11.14	1.07
		6/2/2011	0.00	162.0	6.62	0.324	17.31	1.70
		4/18-5/4/2012	0.0/0.0	195/19	6.16/9.54	0.440/0.419	12.71/14.05	8.90/16.07
		11/14/2013	0.92	28.6	7.80	0.910	9.02	5.86
		9/18/2014	6.10	278.0	7.68	0.369	13.62	13.04
		8/18/2015	0.00	167.0	6.91	0.352	15.91	3.88
		8/26/2016	3.50	-73.0	7.03	0.371	20.2	8.26
		8/23/2017	6.00	0.0	6.74	0.367	18.7	7.88
		8/28/2018	0.0	103.0	6.03	0.375	20.64	9.59
RW-11	100-125'	6/7/2010	11.90	143.8	5.55	0.042	16.53	8.76
		5/26/2011	0.00	211.0	5.73	0.053	11.04	8.99
RW-11	142-167'	6/7/2010	6.30	165.8	5.56	0.040	13.97	9.63
		5/26/2011	0.00	210.0	5.61	0.054	10.41	7.70
RW-11	221-246'	6/8/2010	7.97	99.0	6.42	0.124	13.71	7.70
		5/25/2011	0.00	232.0	4.99	0.032	12.81	7.47
RW-11	252-272'	6/8/2010	4.21	94.6	6.43	0.127	14.12	2.74
		5/25/2011	0.00	225.0	5.44	0.054	15.46	6.24
RW-11D	262-267'	5/1/2012	0.00	9.0	11.11	0.911	12.00	5.59
		5/1/2012	0.00	-91.0	12.51	4.860	11.63	6.23
		11/14/2013	15.10	-97.0	11.90	3.550	9.28	7.34
		8/25/15 - 8/26/15	NR	Nr	NR	NR	NR	NR
		5/27/2016	16.60	-342.0	12.46	0.367	22.60	1.26
		8/23/2016	24.50	-70.0	11.92	2.300	15.04	7.68
		2/7/2017	2705.00	-150.0	12.76	4.780	7.73	4.81
		8/29/2017	1.70	-191.0	12.31	3.280	14.91	10.69
		8/31/2018	0.0	-107.0	12.37	3.250	16.30	10.37
RW-11S	236-241'	5/1/2012	0.00	-4.0	10.45	0.187	11.96	5.70
		11/13/2013	0.00	20.0	6.67	0.149	9.76	3.24
		9/12/2014	0.00	98.0	7.85	0.107	20.85	9.16
		8/12/2015	0.00	101.0	7.18	0.105	17.75	10.42
		5/27/2016	0.80	-160.7	8.34	0.106	14.80	8.31
		8/23/2016	7.70	-37.0	6.99	0.164	25.99	7.19
		2/7/2017	8.00	-29.0	7.67	0.220	8.04	12.59
		8/25/2017	0.00	-57.0	7.06	0.124	19.42	9.76
		8/31/2018	0.0	-43.0	8.33	0.178	14.69	10.83
RW-12	50-76'	5/10/2012	38.90	-290.0	7.27	0.589	11.40	0.88
	96-116'	5/10/2012	47.30	-164.0	8.06	0.604	12.22	0.67
	125-148'	5/11/2012	35.30	45.0	5.59	0.609	11.86	1.72
RW-12	55-65	9/19/2014	0.00	41.0	13.11	1.770	23.71	3.50
		8/17/2015	0.00	-100.0	11.05	1.480	26.10	1.24
		8/22/2016	0.00	-83.0	10.95	1.150	21.90	8.85
		8/18/2017	0.00	-70.0	10.45	1.100	20.33	8.80
		8/29/2018	0.0	-96.0	9.19	0.869	18.02	10.12
RW-12	130-140	9/19/2014	0.00	58.0	2.12	1.540	14.66	6.55
		8/12/2015	2.89	-78.0	11.50	1.140	20.30	12.51
		8/25/2016	20.50	-210.0	11.14	0.752	18.08	0.54
		8/18/2017	20.00	-200.0	11.00	0.750	18.59	0.59
		8/29/2018	0.0	-22.0	7.86	0.129	18.25	4.77

Table 4B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2018)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-13	71-91'	11/12/2013	33.00	-54.0	8.23	0.274	6.83	1.20
		8/24/2015	147.20	97.5	7.87	0.625	16.10	0.68
		8/25/2016	6.10	131.0	6.87	0.434	13.57	0.71
		8/16/2017	39.10	121.0	6.66	0.419	15.10	0.36
		8/24/2018	14.10	139.0	6.83	0.448	12.49	0.17
	100-120'	11/13/2013	49.70	-30.0	7.91	0/266	10.24	7.84
		9/16/2014	0.00	120.0	12.59	3.980	20.56	1.79
		8/12/15 - 8/13/15	NR	NR	NR	NR	NR	NR
		8/25/16 - 8/26/16	25.90	-79.0	12.09	2.520	19.60	3.03
		8/29/2017	0.20	-126.0	12.28	3.120	14.36	10.92
		8/30/2018	281.00	-39.00	10.83	0.84	22.89	8.64
	130-150'	11/14/2013	49.20	-136.0	8.20	0.247	10.46	1.45
RW-13	150-170'	11/14/2013	27.00	-118.0	8.75	0.241	10.89	1.50
		9/16/2014	0.00	48.0	7.10	0.349	21.03	2.35
		8/12/2015	2.10	-65.0	7.73	0.339	21.04	9.00
		8/25/2016	38.00	8.0	8.00	0.355	19.75	9.46
		8/25/2017	7.00	-30.0	8.36	0.298	16.22	4.20
		8/30/2018	0.0	-59.0	7.71	0.243	20.32	11.77
RW-14S	135-153'	5/31/2016	8.50	46.2	8.87	0.450	19.50	1.59
		8/29/2016	1.40	-57.0	8.00	0.550	17.28	11.28
		2/8/2017	2.00	-173.0	8.25	0.483	11.09	10.03
		8/18/2017	2.10	-149.0	7.52	0.444	19.51	3.33
		8/18/2017	2.10	-149.0	7.52	0.444	19.51	3.33
		8/31/2018	0.0	-30.0	7.62	0.450	15.08	11.86
RW-14D	175-185'	5/31/2016	16.20	-35.0	7.14	0.656	19.90	1.01
		8/29/2016	8.40	-140.0	7.60	0.849	20.71	8.40
		2/8/2017	3.20	-147.0	7.24	0.930	10.62	10.97
		8/16/2017	1.70	-140.0	7.24	1.180	21.39	6.73
		8/31/2018	0.0	-106.0	7.49	0.779	17.28	10.68
RW-15S	110-120'	5/27/2016	2.20	-115.5	12.07	1.052	23.30	1.75
		8/24/2016	11.00	-41.0	11.06	0.907	20.11	8.61
		2/8/2017	9.60	-95.0	10.70	0.505	11.47	11.49
		8/17/2017	6.10	-26.0	10.29	0.437	21.20	7.32
		8/31/2018	0.0	-151.0	9.23	0.433	15.27	11.15
RW-15D	127-137'	5/27/2016	3.10	-133.1	12.50	2.020	19.20	2.52
		8/24/2016	2.70	-95.0	11.85	2.250	19.00	2.26
		2/8/2017	18.60	-171.0	12.05	1.760	10.64	5.39
		8/17/2017	5.10	-56.0	11.78	1.500	19.30	9.50
		8/31/2018	0.0	-225.0	11.49	1.010	14.72	11.49
RW - 16	52 - 62'	8/16/2016	18.30	67.0	5.95	0.588	12.80	0.00
		2/2/2017	20.10	122.0	6.96	0.611	9.58	0.63
		8/17/2017	5.10	122.0	6.74	0.547	12.25	0.06
		8/21/2018	0.00	85.0	6.70	0.582	12.45	0.18

Notes:
Nephelometric Turbidity Units
n Reduction Potential measured in millivolts
Measured in Standard Units
cific Conductivity measure in millimhos per centimeter
erature measured in degrees Centigrade
ed Oxygen measured in milligrams per Liter
= Parameters not recorded
SU = Standard Units
rameters reported at time of sampling.

Table 4C
Summary of Historical Mine Water Geochemical Data (2006 - 2018)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
CM AIRSHAFT	50'	5/7/2012	0.00	-82.0	7.06	0.061	14.41	2.86
		9/12/2014	0.00	-103.0	6.68	1.170	12.57	0.48
		8/14/2015	16.10	-52.6	6.46	0.104	16.70	2.23
		8/22/2016	0.00	-103.0	6.75	0.682	16.69	0.03
		8/21/2017	4.20	-146.0	6.87	1.050	12.65	0.79
		8/23/2018	45.40	-65.0	6.80	0.854	12.47	1.17
CM AIRSHAFT	100'	5/7/2012	0.00	-95.0	7.12	1.110	14.82	3.01
		9/18/2014	42.40	-107.0	6.81	0.933	12.55	0.58
		8/17/2015	28.50	-89.0	6.69	0.914	14.49	3.20
		8/22/2016	15.10	-235.0	7.72	0.732	16.95	0.74
		8/21/2017	34.50	-136.0	7.01	0.971	17.12	1.86
		8/23/2018	46.20	-109.0	7.09	0.892	12.73	4.34
CM AIRSHAFT	160'	5/9/2012	0.00	-95.0	7.11	1.000	18.85	1.85
		9/18/2014	43.80	-107.0	6.86	0.884	12.99	0.68
		8/17/2015	37.00	-77.0	6.61	0.940	12.42	2.06
		8/22/2016	29.30	-237.0	7.61	0.785	17.91	0.05
		2/7/2017	42.60	-133.0	7.02	0.932	12.49	0.10
		8/21/2017	42.90	-178.0	7.23	1.030	15.35	0.27
		8/23/2018	14.60	-145.0	7.17	0.995	13.18	0.62
CM AIRSHAFT	275'	5/9/2012	0.00	-116.0	7.23	0.882	22.32	4.01
		9/18/2014	241.00	-103.0	6.77	0.830	13.03	0.58
		8/18/2015	80.10	-83.0	6.68	0.920	14.39	2.50
		8/22/2016	44.60	-117.0	6.74	0.838	17.19	0.04
		2/7/2017	38.90	-103.0	6.75	0.878	11.49	0.10
		8/22/2017	19.20	-85.0	6.75	0.847	12.83	0.00
		8/23/2018	26.80	-94.0	6.92	0.809	15.12	0.32
PM AIRSHAFT	50'	4/23/2012	1.50	197.0	6.53	0.061	11.10	6.03
		9/16/2014	2.30	360.0	5.43	0.057	12.50	7.88
		8/12/2015	23.40	-197.8	6.45	0.659	14.80	2.73
		6/1/2016	4.09	-16.8	7.79	0.043	12.20	6.00
		8/23/2016	0.00	58.0	6.38	0.064	15.02	3.85
		2/7/2017	3.70	53.0	6.10	0.060	5.99	5.35
		8/23/2017	7.30	59.0	6.17	0.062	14.01	2.79
		8/24/2018	7.30	59.0	6.17	0.062	14.01	2.79
PM AIRSHAFT	180'	8/22/2007	NR	30.7	5.89	NR	NR	3.19
		10/15/2007	NR	-51.2	6.42	NR	NR	4.49
		5/7/2008	1.30	98.8	5.76	0.051	13.27	6.78
		9/18/2008	7.00	-77.3	6.11	0.014	14.56	1.50
		7/10/2009	3.65	30.8	5.99	0.350	14.44	0.37
		10/29/2009	6.50	17.8	5.97	0.048	12.73	0.04
		6/4/2010	0.61	92.1	6.15	0.035	12.78	5.50
		5/24/2011	1.40	-17.0	6.18	0.204	9.06	4.73
		4/23/2012	0.00	207.0	6.47	0.039	10.84	6.25
		9/16/2014	2.90	-345.0	5.99	0.551	12.79	0.87
		8/17/2015	35.00	-95.0	6.27	0.424	17.75	8.03
		6/1/2016	7.00	-166.4	6.38	0.411	12.9	0.30
		8/23/2016	47.10	-125.0	6.26	0.518	13.49	0.00
		2/7/2017	15.80	-164.0	6.16	0.445	7.07	0.18
		8/23/2017	148.00	-58.0	6.26	0.507	12.19	0.00
		8/24/2018	148.0	-58.0	6.26	0.507	12.19	0.00
PM AIRSHAFT	230'	8/22/2007	NR	-35.5	6.10	NR	NR	1.86
		10/15/2007	NR	-58.6	6.36	NR	NR	4.03
		5/7/2008	0.00	-43.6	5.96	1.074	12.94	1.22
		9/18/2008	24.00	-80.6	6.66	0.006	17.35	3.83
		7/10/2009	4.57	30.1	5.62	0.355	14.95	0.45
		10/29/2009	1.02	-86.8	6.08	0.833	12.76	0.35
		6/4/2010	0.27	-87.3	6.08	0.783	12.81	0.25
		5/24/2011	82.20	-69.0	6.19	0.978	9.00	0.33
		4/24/2012	0.00	180.0	6.62	0.065	11.00	9.01
		9/17/2014	0.00	-106.0	6.21	0.970	14.44	0.57
		8/18/2015	0.00	-95.0	6.29	0.941	15.52	2.00
		6/1/2016	31.90	-80.1	6.65	0.742	15.3	0.21
		8/23/2016	68.20	-113.0	6.30	1.020	11.89	0.00
		2/7/2017	42.10	-95.0	6.36	1.050	5.86	0.00
		8/23/2017	258.00	-82.0	6.35	0.960	12.65	0.00
		8/24/2018	258.00	-82.0	6.35	0.960	12.65	0.00

Notes:
NTU = Nephelometric Turbidity Units
ORP (mV) = Oxidation Reduction Potential measured in millivolts
pH = Measured in Standard Units
Spec Cond (mmhos/cm) = Specific Conductivity measure in millimhos per centimeter
Temp ^{o}C = Temperature measured in degrees Centigrade
DO (mg/L) = Dissolved Oxygen measured in milligrams per Liter
NR = Parameters not recorded
SU = Standard Units

Geochemical parameters reported at time of sampling.

Table 4D
Summary of Field Parameters at Sampling Time - Overburden Wells - August 2018

Ringwood Mines/Landfill Superfund Site

Well ID	Sample Date	Sample Time	Sample Method	Minutes elapsed	Rate (ml/pm)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water (feet)	Diss. Oxygen (mg/L)
OB-1 *	NS	NS	NS	---	---	---	---	---	---	---	---	---
OB-2*	8/23/2018	14:20	Low Flow	40	320	0.00	197.0	6.05	0.117	12.51	17.48	6.41
OB-3*	8/22/2018	10:00	Low Flow	25	280	26.60	218.0	5.91	0.105	14.70	3.35	6.68
OB-4*	8/21/2018	16:35	Low Flow	30	240	0.00	-55.0	6.62	0.886	15.32	17.92	0.32
OB-5*	8/23/2018	10:20	Low Flow	40	320	0.00	-53.0	6.54	0.777	14.85	2.43	2.20
OB-6*	8/21/2018	15:15	Low Flow	45	240	25.90	29.0	6.07	0.177	14.69	7.05	0.14
OB-7*	8/21/2018	12:50	Low Flow	45	200	7.30	-26.0	6.86	0.609	14.09	5.11	0.01
OB-10	8/22/2018	14:30	Low Flow	35	400	0.00	233.0	6.37	0.124	13.33	6.41	2.88
OB-11R	8/22/2018	14:05	Low Flow	35	240	9.80	-104.0	6.54	0.464	17.70	16.92	1.76
OB-12	8/22/2018	11:50	Low Flow	50	320	0.0	205.0	5.65	0.074	12.36	8.90	6.26
OB-13	8/22/2018	12:00	Low Flow	35	280	0.00	250.0	5.86	0.085	12.84	12.61	6.06
OB-14A	8/21/2018	14:45	Low Flow	30	160	6.8	-49.0	6.35	0.709	14.77	10.72	0.71
OB-14B	8/21/2018	15:50	Low Flow	35	240	9.00	-32.0	6.95	0.762	13.57	12.94	0.38
OB-15B	8/22/2018	12:15	Low Flow	45	320	22.30	-133.0	8.01	0.172	13.80	3.68	0.00
OB-16	8/21/2018	9:35	Low Flow	35	360	6.90	-40.0	6.39	0.942	15.72	6.15	1.45
OB-17	8/21/2018	12:05	Low Flow	35	240	7.10	23.0	6.28	0.673	16.01	6.27	0.087
OB-18	8/21/2018	10:00	Low Flow	50	320	7.00	204.0	6.71	0.272	12.34	7.15	2.88
OB-19	8/22/2018	15:45	Low Flow	40	280	4.90	-20.0	6.12	0.185	13.38	12.13	0.12
OB-20A	8/23/2016	12:35	Low Flow	45	200	10.20	14.0	6.10	0.204	13.26	15.16	0.24
OB-20B	8/23/2018	10:45	Low Flow	50	140	4.1	-38.0	11.27	0.394	12.1	15.10	0.01
OB-21	8/22/2018	10:30	Low Flow	60	200	64.5	194.0	6.24	0.102	18.09	6.14	2.64
OB-22	8/21/2018	13:20	Low Flow	30	160	6.60	235.0	6.02	0.321	15.67	15.42	7.21
OB-23	8/21/2018	14:55	Low Flow	45	240	7.40	-111.0	6.37	0.900	15.12	18.30	4.57
OB-24	8/22/2018	10:25	Low Flow	40	360	1.20	141.0	7.13	0.700	15.34	6.06	0.20
OB-25	8/21/2018	10:35	Low Flow	85	150	35.0	167.0	6.77	0.646	17.88	13.11	4.95
OB-26	NS	NS	NS	---	---	---	---	---	---	---	---	---
OB-27	8/22/2018	14:35	Low Flow	55	250	40.8	-65.0	6.61	0.343	16.47	15.12	0.11
OB-28	8/21/2018	12:35	Low Flow	55	320	44.8	-9.0	6.79	1.010	13.65	1.73	2.28
OB-29	8/22/2018	16:05	Low Flow	55	280	22.9	216.0	6.39	0.121	14.92	5.39	2.72
OB-30A	8/24/2018	12:20	NS	50	240	1.1	199.00	6.11	0.263	12.83	19.00	2.28
OB-30B	8/22/2018	15:55	Low Flow	40	280	7.90	199.0	5.86	0.237	12.04	18.69	0.47
OB-30C	8/23/2018	14:55	Low Flow	55	170	48.2	-46.0	8.09	0.362	16.29	22.10	0.20
OB-31	8/22/2018	12:20	Low Flow	45	280	39.80	-103.0	6.66	0.252	13.15	15.06	0.71
OB-32	8/22/2018	16:15	Low Flow	50	320	0.00	-122.0	6.71	0.361	11.65	17.40	6.83
OB-33	8/22/2018	14:25	Low Flow	55	320	23.0	145.0	6.82	0.136	13.9	10.43	5.48
SC-1	8/24/2018	12:50	Low Flow	40	400	30.90	5.0	6.06	0.264	18.93	14.17	0.33
SC-2	8/23/2018	15:50	Low Flow	45	320	33.40	170.0	6.63	0.564	14.41	59.84	1.48

Notes:
--- = well dry and/or could not be sampled
°C = degrees Celsius
mg/L = milligrams per liter
mL/pm = milliliters per minute
mmhos/cm = millimhos per centimeter
mV = millivolts
NTU = Nephelometric Turbidity Unit
ORP = oxidation-reduction potential
SU = Standard Units
NS = Not Sampled
NR = Not Recorded
* Wells OB-1 through OB-7 were completed as bedrock wells due to thin overburden deposits.

Table 4E
Summary of Field Parameters at Sampling Time - Bedrock Monitoring Wells - August 2018

Ringwood Mines/Landfill Superfund Site

Well ID	Interval (ft bgs)	Sample Date	Sample Time	Sample Method	Minutes elapsed	Rate (ml/pm)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water (feet)	Dissolved Oxygen (mg/L)
RW-1	64 to 74	NS	NS	ZIST	NS	NS	NS	NS	NS	NS	NS	NS	NS
RW-1	131 to 141	NS	NS	ZIST	NS	NS	NS	NS	NS	NS	NS	NS	NS
RW-2	279 to 289	8/28/2018	10:50	ZIST	20	1600	0.0	-91.0	9.13	1.080	22.66	NM	8.99
RW-2	452 to 462	8/28/2018	11:30	ZIST	30	1600	0.0	-30.0	9.86	1.880	22.75	NM	1.60
RW-3	77 to 87	8/30/2018	13:35	ZIST	12		0.0	-9.0	7.14	0.512	19.05	NM	8.82
RW-3DS	155 to 160	8/30/2018	13:00	ZIST	10		0.0	-58.0	10.2	0.971	19.49	NM	9.10
RW-3DD	175 to 180	8/30/2018	12:30	ZIST	3	---	0.0	-12.0	9.48	0.209	18.94	NM	9.35
RW-4A	62 to 72	8/30/2018	14:20	ZIST	20	---	2.7	86.0	6.8	0.140	20.05	NM	3.25
RW-4A	113 to 123	8/31/2018	14:45	ZIST	5	---	0.0	101.0	6.68	0.134	18.10	NM	9.62
RW-4	333 to 343	8/30/2018	15:50	ZIST	10	1600	0.0	-41.0	11.1	0.319	17.65	NM	9.56
RW-4	393 to 403	8/30/2018	15:20	ZIST	15		0.0	89.0	7.09	0.166	17.62	NM	1.42
RW-5	99 to 119	8/24/2018	11:55	Low Flow	50	120	19.1	-124.0	11.58	1.050	17.43	12.65	0.72
RW-5A	54 to 74	8/22/2018	12:25	Low Flow	45	120	14.20	-18.0	6.99	0.298	15.59	14.85	0.32
RW-6	99 to 119	8/23/2018	14:25	Low Flow	35	280	0.30	-40.0	6.32	0.621	11.27	13.02	0.00
RW-6A	58 to 78	8/23/2018	15:45	Low Flow	35	180	1.30	-22.0	6.41	0.658	12.07	14.35	0.11
RW-7	99 to 119	8/22/2018	10:15	Low Flow	40	210	22.00	201.0	6.51	0.100	16.48	2.81	5.27
RW-8A	47 to 57	NS	---	ZIST	---	---	---	---	---	---	---	---	---
RW-8	163 to 173	8/29/2018	11:00	ZIST	15	1600	0.0	-55.0	7.32	0.455	20.75	NM	9.66
RW-8	204 to 214	8/29/2018	11:30	ZIST	15	1600	0	-73	9.08	0.781	23.3	NM	8.84
RW-9A	25 to 35	NS	---	ZIST	---	---	---	---	---	---	---	---	---
RW-9A	85 to 95	8/29/2018	14:20	ZIST	20	800	0.0	7.0	7.61	0.231	26.93	NM	8.81
RW-9	139 to 149	8/29/2018	15:15	ZIST	15	1600	0.0	17.0	6.84	1.080	20.47	NM	8.95
RW-9	206 to 216	8/29/2018	15:30	ZIST	15	1600	0.00	70.00	8.44	1.09	22.05	NM	9.08
RW-10A	51 to 61	8/28/2018	13:00	ZIST	20	1600	0.0	53.0	7.58	0.511	22.06	NM	3.12
RW-10A	75 to 85	8/28/2018	13:20	ZIST	10	1600	0.0	103.0	6.03	0.375	20.64	NM	9.59
RW-10	120 to 130	8/28/2018	14:20	ZIST	20	1600	0.0	-20.0	10.73	0.571	16.84	NM	10.90
RW-10	185 to 195	8/28/2018	14:35	ZIST	10	1600	0.0	41.0	10.03	0.374	16.05	NM	10.93
RW-11S	236 to 241	8/31/2018	10:20	ZIST	10	800	0.0	-43.0	8.33	0.178	14.69	NM	10.83
RW-11D	262 to 267	8/31/2018	10:15	ZIST	10	400	0.0	-107.0	12.37	3.250	16.30	NM	10.37
RW-12	55 to 65	8/29/2018	8:50	ZIST	15	1600	0.0	-96.0	9.19	0.869	18.02	NM	10.12
RW-12	130 to 140	8/29/2018	9:40	ZIST	10	1600	0.0	-22.0	7.86	0.129	18.25	NM	4.77
RW-13	71 to 91	8/24/2018	10:10	Low Flow	45	240	14.10	139.0	6.83	0.448	12.49	17.56	0.17
RW-13	100 to 120	8/30/2018	12:10	ZIST	15.00	---	281.00	-39.00	10.83	0.84	22.89	NM	8.64
RW-13	150 to 170	8/30/2018	11:25	ZIST	0	---	0.0	-59.0	7.71	0.243	20.32	NM	11.77
RW-14S	135 to 155	8/31/2018	12:15	ZIST	10	3200	0.0	-30.0	7.62	0.450	15.08	NM	11.86
RW-14D	175 to 185	8/31/2018	12:40	ZIST	10	1600	0.0	-106.0	7.49	0.779	17.28	NM	10.68
RW-15S	110 to 120	8/31/2018	13:20	ZIST	10	1600	0.0	-151.0	9.23	0.433	15.27	NM	11.15
RW-15D	127 to 137	8/31/2018	14:00	ZIST	10	1600	0.0	-225.0	11.49	1.010	14.72	NM	11.49
RW-16	52 to 62	8/21/2018	16:45	Low Flow	45	320	0.00	85.0	6.70	0.582	12.45	4.90	0.18

Notes:
* Samples were collected on multiple days.
--- = no parameters were recorded due to poor yield
°C = degrees Celsius
ft bgs = feet below ground surface
mg/L = milligrams per liter
mL/pm = milliliters per minute
mmhos/cm = millimhos per centimeter
mV = millivolts
NTU = Nephelometric Turbidity Unit
ORP = oxidation-reduction potential
SU = Standard Units
ZIST = Zone Isolation System Technology
NM = Not Measureable
NS = Not Sampled

Table 4F
Summary of Field Parameters at Sampling Time - Peters and Cannon Mine Shafts - August 2018

Ringwood Mines/Landfill Superfund Site

Well ID	Sample Depth (ft bgs)	Sample Date	Sample Time	Sample Method	Minutes elapsed	Rate (mL/pm)	Turbidity (NTUs)	ORP (mV)	pH (SU)	Conductivity (mmhos/cm)	Temperature (ºC)	Depth to Water (feet)	Dissolved Oxygen (mg/L)
PMAirShaft	50	8/24/2018	8:55	Low Flow	35	500	45.40	-65.0	6.80	0.854	12.47	7.96	1.17
	180	8/24/2018	11:30	Low Flow	35	500	46.20	-109.0	7.09	0.892	12.73	7.96	4.34
	230	8/24/2018	13:25	Low Flow	35	500	14.60	-145.0	7.17	0.995	13.18	7.96	0.62
CMAirShaft	50	8/23/2018	10:45	Low Flow	40	500	26.80	-94.0	6.92	0.809	15.12	7.69	0.32
	100	8/23/2018	13:15	Low Flow	35	500	7.30	59.0	6.17	0.062	14.01	8.82	2.79
	160	8/23/2018	14:25	Low Flow	65	500	148.0	-58.0	6.26	0.507	12.19	8.82	0.00
	275	8/23/2018	10:15	Low Flow	50	500	258.00	-82.0	6.35	0.960	12.65	8.82	0.00

Notes:
°C = degrees Celsius
ft bgs = feet below ground surface
mg/L = milligrams per liter
mL/pm = milliliters per minute
mmhos/cm = millimhos per centimeter
mV = millivolts
NTU = Nephelometric Turbidity Unit
ORP = oxidation-reduction potential
SU = standard units

Table 4G
Summary of Surface Water Field Parameters - August 2018

Ringwood Mines/Landfill Superfund Site

Surface Location	Date	Time (hrs.)	NTU	Redox	pH	Conductivity (ms/cm)	Temperature (C˚)	D.O. (mg/l)	Sample ID	Comments
SW-MRB-00	8/27/2018	13:00	7.65	83	6.56	0.047	19.65	8.59	MRB-00-082718	
SW-MRB-01	8/27/2018	13:25	0	101	6.37	0.046	20.59	6.65	MRB-01-082718	
SW-MRB-02	8/27/2018	13:50	3.84	32	6.51	0.056	22	4.5	MRB-02-082718	
SW-MRB-03	8/27/2018	14:15	7.8	112	7.02	0.103	21.22	9.03	MRB-03-082718	
SW-NOB-01	8/27/2018	8:55	0	-33	7.81	0.071	18.21	10.15	NOB-01-082718	
SW-NOB-02	8/27/2018	15:05	6.4	172	6.81	0.076	20.39	7.75	NOB-02-082718	
SW-PAB-00	8/27/2018	9:10	9.5	-8	5.9	0.121	16.95	6.77	PAB-00-082718	
SW-PAB-01	8/27/2018	8:30	11.3	152	7.2	0.069	18.13	9.4	PAB-01-082718	
SW-PAB-01A	8/27/2018	9:30	10.47	0.23	6.23	0.124	17.44	11.28	PAB-01A-082718	
SW-PAB-02	8/27/2018	11:30	10.6	0.69	6.25	0.138	19.89	9.45	PAB-02-082718	
SW-PAB-03	8/27/2018	11:00	16.3	0.33	6.05	0.147	18.74	9.49	PAB-03-082718	
SW-PAB-03A	8/27/2018	15:20	13.5	162	7.33	0.134	21.02	8.61	PAB-03A-082718	
SW-PAB-04	8/27/2018	14:50	5.8	156	7.47	0.131	20.5	10.26	PAB-04-082718	
SW-PMB-01	8/27/2018	11:30	10.9	-48	7.33	0.444	20.33	7.15	PMB-01-082718	Dup-02-082718
SW-PMB-01A	8/27/2018	10:45	47.4	-85	6.73	0.42	20.09	3.25	PMB-01A-082718	MS/MSD
SW-PMB-02	8/27/2018	12:00	44.8	76	7.76	0.505	19.24	8.22	PMB-02-082718	
SW-PMB-02A	8/27/2018	12:05	6.3	90	7.56	0.405	19.46	9.66	PMB-02A-082718	
PMP-POND	8/27/2018	9:30	21.5	121	6.3	0.135	21.22	5.8	PMP-POND-082718	
SW-RC-01	8/27/2018	12:45	6.5	138	7.16	0.136	22.63	9.14	RC-01-082718	
SW-RC-02	8/27/2018	13:25	5.1	130	7.44	0.141	23.31	10.77	RC-02-082718	
SW-RC-03	8/27/2018	15:30	0	117	7.57	0.146	23.28	8.5	RC-03-082718	
SW-RM-01	8/27/2018	13:00	89	148	7.54	0.139	24.05	9.22	RM-01-082718	
SW-SP-00	8/27/2018	14:20	89	148	7.08	0.139	24.05	9.22	SP-00-082718	
SW-SP-01	8/27/2018	13:45	4.6	162	7	0.14	22.55	9.71	SP-01-082718	
SR-3 POND	8/27/2018	9:45	19.5	142	6.26	0.17	20.22	4.97	SR3-POND-082718	
SR-3 SEEP 1	8/27/2018	10:00	49.7	-64	6.35	0.241	13.36	11.29	SR3-SEEP-01-082718	
SR-3 SEEP 2	8/27/2018	10:15	45.5	-11	5.99	0.237	12.83	12.06	SR3-SEEP-02-082718	
SW-03	8/27/2018	14:45	0	89	7.5	0.188	21.21	8.28	SW-3-082718	
SW-04	8/27/2018	15:45	0	113	7.91	0.358	20.98	7.91	SW-04-082718	
SW-11	8/27/2018	8:45	11	95	6.3	0.068	18.17	9.4	SW-11-082718	Dup-01-082718
SW-17	8/27/2018	16:00	0	102	7.99	0.334	20.8	8.52	SW-17-082718	

TABLE 5A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20B	OB-21	OB-27	OB-31	RW-11D (262-267)	RW-11S (236-241)	RW-13 (100-120)	RW-13 (150-170)	RW-14D (175-185)	RW-14S (135-155)	RW-15D (127-137)
1,1-Dichloroethane	ug/l	50						3.1								
1,2-Dichloroethane	ug/l	2						0.45 J								
2-Butanone (MEK)	ug/l	300								3.5 J						
Acetone	ug/l	6000								39		14				41
Benzene	ug/l	1	2					3.3		11						
Carbon disulfide	ug/l	700		0.26 UB	0.23 UB		0.27 UB			10		1.3	0.52 J	0.82 J	0.54 J	11
Chlorobenzene	ug/l	50								4.8						
Chloroethane[1]	ug/l	5	27		1.2	1.1		180	6.4	5.5				0.6 J		
Chloromethane	ug/l															0.48 J
cis-1,2-Dichloroethene	ug/l	70	0.35 J					0.43 J								
Cyclohexane	ug/l		2.4			0.87 J		1.4								
Dichlorodifluoromethane	ug/l	1000														
Ethylbenzene	ug/l	700														
Isopropylbenzene	ug/l	700	0.75 J					3.2		0.95 J						
Methylcyclohexane	ug/l		0.67 J			0.47 J		0.93 J								
Methylene Chloride	ug/l	3		0.34 UB				1.1 B		0.4 J					0.32 J	
Toluene	ug/l	600						0.48 J				0.41 J				1.5
Vinyl chloride	ug/l	1						0.29 J								
Xylenes, Total	ug/l	1000						7.4								
Tentatively Identified Compounds (TICs)																
1H-Indene, 2,3-dihydro-1,3-dimethyl-	ug/l								9.6 NJ							
1H-Indene, 2,3-dihydro-1,6-dimethyl-	ug/l		19 NJ					28 NJ								
1H-Indene, 2,3-dihydro-5-methyl-	ug/l							46 NJ								
1-Pentanol, 2-ethyl-4-methyl-	ug/l											7 NJ				
1-Phenyl-1-butene	ug/l		11 NJ													
1-Propene, 2-methyl-	ug/l									9.1 NJ						
Benzene, 1,2,3,5-tetramethyl-	ug/l							21 NJ								
Benzene, 1,2,3-trimethyl-	ug/l															
Benzene, 1,2,4,5-tetramethyl-	ug/l		14 NJ													
Benzene, 1-ethyl-2,4-dimethyl-	ug/l		6 NJ													
Benzene, 1-methyl-2-(1-methylethyl)-	ug/l							15 NJ								
Benzene, 2-ethenyl-1,4-dimethyl-	ug/l		23 NJ													
Cyclopentane, methyl-	ug/l		17 NJ													
Ethanethiol	ug/l										5.1 NJ					
Indane	ug/l		12 NJ			5.2 NJ		24 NJ								
Naphthalene	ug/l	300						10 NJ								
Unknown	ug/l		5.8 NJ					13 NJ	6.1 NJ							

See Table 12 for validation qualifiers.

Result exceeds NJGWQS (NJAC 7:9C August 2018)

[1] Interim Groundwater Quality Criteria

TABLE 5A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS ug/l	RW-15S (110-120)	RW-15S(110-120) DUP	RW-3 (77-87)	RW-3DD (175-180)	RW-3DS (155-160)	RW-4 (333-343)	RW-4 (393-403)	RW-4A (113-123)	RW-4A (62-72)	RW-5	RW-6	RW-6A	SC-01
1,1-Dichloroethane	ug/l	50					2.7						0.4 J	0.32 J	
1,2-Dichloroethane	ug/l	2													
2-Butanone (MEK)	ug/l	300													
Acetone	ug/l	6000	12	9											
Benzene	ug/l	1											1.3	0.9 J	1.6
Carbon disulfide	ug/l	700	4.3	2.4	1.1	9.2	17	0.76 J	0.64 J	0.48 J	0.61 J				
Chlorobenzene	ug/l	50													
Chloroethane[1]	ug/l	5										1.2	3.5	1.4	1.3
Chloromethane	ug/l		0.42 J					1.1							
cis-1,2-Dichloroethene	ug/l	70													
Cyclohexane	ug/l												0.36 J	0.42 J	1.5
Dichlorodifluoromethane	ug/l	1000													0.58 J
Ethylbenzene	ug/l	700					0.44 J								0.34 J
Isopropylbenzene	ug/l	700													1.5
Methylcyclohexane	ug/l												0.28 J		1.2
Methylene Chloride	ug/l	3	0.44 J	0.45 J			0.33 J								
Toluene	ug/l	600	1	0.84 J			0.46 J						1		0.43 J
Vinyl chloride	ug/l	1													
Xylenes, Total	ug/l	1000					0.67 J								66
Tentatively Identified Compounds (TICs)															
1H-Indene, 2,3-dihydro-1,3-dimethyl-	ug/l														
1H-Indene, 2,3-dihydro-1,6-dimethyl-	ug/l														
1H-Indene, 2,3-dihydro-5-methyl-	ug/l														
1-Pentanol, 2-ethyl-4-methyl-	ug/l														
1-Phenyl-1-butene	ug/l														
1-Propene, 2-methyl-	ug/l														
Benzene, 1,2,3,5-tetramethyl-	ug/l														5.9 NJ
Benzene, 1,2,3-trimethyl-	ug/l														8.2 NJ
Benzene, 1,2,4,5-tetramethyl-	ug/l														
Benzene, 1-ethyl-2,4-dimethyl-	ug/l														
Benzene, 1-methyl-2-(1-methylethyl)-	ug/l														
Benzene, 2-ethenyl-1,4-dimethyl-	ug/l														7 NJ
Cyclopentane, methyl-	ug/l														
Ethanethiol	ug/l					9.5 NJ									
Indane	ug/l														
Naphthalene	ug/l	300													
Unknown	ug/l														

See Table 12 for validation qualifiers.

Result exceeds NJGWQS (NJAC 7:9C August 2018)

[1] Interim Groundwater Quality Criteria

TABLE 5B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) and PCBs IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS ug/l	OB-11R	OB-19	OB-20A	OB-20B	OB-21	OB-27	OB-30A	OB-30C	OB-31	RW-11D (262-267)	RW-11S (236-241)	RW-13 (100-120)
1,4-Dioxane	ug/l	0.4	3.7	0.97	0.28 B	0.59 B		17	0.34 B	0.31 B	1.1	41	0.9	
Acetophenone	ug/l	700												
Benzo[a]anthracene	ug/l	0.1												
Bis(2-chloroethyl)ether	ug/l	7							0.031					
Hexachlorobenzene	ug/l	0.02							0.027 *					
Isophorone	ug/l	40												0.8 J
Naphthalene	ug/l	300				1.1 J		3.2 J						
N-Nitrosodiphenylamine	ug/l	10												
Phenol	ug/l	2000										2.5 J		2.8 J
Tentatively Identified Compounds (TICs)														
.gamma. Dodecalactone	ug/l													8 NJ
1,4-Dioxane	ug/l	0.4										6.4 NJ		
2(3H)-Benzothiazolone	ug/l											7.1 NJ		
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9	ug/l											12 NJ		20 NJ
Benzene, 2-ethenyl-1,4-dimethyl-	ug/l							9 NJ						
Benzenesulfonamide, N-butyl-	ug/l													
Benzenesulfonamide, N-cyclohexyl-4-m	ug/l											7.9 NJ		
Benzoic Acid	ug/l	30000												
Cyclic octaatomic sulfur	ug/l													
Cyclohexene, 1-methyl-4-(1-methylether	ug/l													
Diethyltoluamide	ug/l											7.2 NJ		6.8 NJ
Dodecanoic acid	ug/l													
Ethanol, 1-(2-butoxyethoxy)-	ug/l													
Ethanol, 2-(2-butoxyethoxy)-	ug/l													150 NJ
Ethanol, 2-butoxy-	ug/l													
Hexadecanoic acid, butyl ester	ug/l			8.8 NJ										
Indolizine	ug/l													
Naphthalene, 2,3-dimethyl-	ug/l							7.8 NJ						
Propanedioic acid, phenyl-	ug/l													
Sulfur	ug/l													
Unknown	ug/l		11 NJ				140 NJ	7.3 NJ				28 NJ		7 NJ
Vanillin	ug/l													
PCBs														
None	ug/l													

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.026 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 5B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) and PCBs IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS ug/l	RW-13 (71-91)	RW-13 (71-91) DUP	RW-14D (175-185)	RW-14S (135-155)	RW-15D (127-137)	RW-15S (110-120)	RW-15S(110-120) DUP	RW-3 (77-87)	RW-3DD	RW-3DS	RW-4 (333-343)
1,4-Dioxane	ug/l	0.4	0.5 B	0.45 B	0.36		0.49			14	12	12	
Acetophenone	ug/l	700					1.4 J						
Benzo[a]anthracene	ug/l	0.1											
Bis(2-chloroethyl)ether	ug/l	7											
Hexachlorobenzene	ug/l	0.02											0.027 *
Isophorone	ug/l	40											
Naphthalene	ug/l	300											
N-Nitrosodiphenylamine	ug/l	10											
Phenol	ug/l	2000					12					4.4 J	
Tentatively Identified Compounds (TICs)													
.gamma. Dodecalactone	ug/l												
1,4-Dioxane	ug/l	0.4											
2(3H)-Benzothiazolone	ug/l												
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9	ug/l										12 NJ		
Benzene, 2-ethenyl-1,4-dimethyl-	ug/l												
Benzenesulfonamide, N-butyl-	ug/l				3400 NJ	3900 NJ	4100 NJ				6.5 NJ		
Benzenesulfonamide, N-cyclohexyl-4-m	ug/l												
Benzoic Acid	ug/l	30000					23 NJ						
Cyclic octaatomic sulfur	ug/l					37 NJ							
Cyclohexene, 1-methyl-4-(1-methylether	ug/l							11 NJ					
Diethyltoluamide	ug/l						7.5 NJ						
Dodecanoic acid	ug/l						12 NJ						
Ethanol, 1-(2-butoxyethoxy)-	ug/l						68 NJ						
Ethanol, 2-(2-butoxyethoxy)-	ug/l				56 NJ			23 NJ	15 NJ				
Ethanol, 2-butoxy-	ug/l						21 NJ						
Hexadecanoic acid, butyl ester	ug/l												
Indolizine	ug/l						6.5 NJ						
Naphthalene, 2,3-dimethyl-	ug/l												
Propanedioic acid, phenyl-	ug/l						16 NJ						
Sulfur	ug/l					22 NJ							
Unknown	ug/l				94 NJ		7.3 NJ						
Vanillin	ug/l						14 NJ						
PCBs													
None	ug/l												

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.026 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 5B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) and PCBs IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS ug/l	RW-4A (113-123)	RW-5	RW-5A	RW-6	RW-6A	SC-1
1,4-Dioxane	ug/l	0.4		6.8		2.1	3.1	0.45 B
Acetophenone	ug/l	700						
Benzo[a]anthracene	ug/l	0.1						0.027 J
Bis(2-chloroethyl)ether	ug/l	7						
Hexachlorobenzene	ug/l	0.02	0.034 *					
Isophorone	ug/l	40						
Naphthalene	ug/l	300						4.5 J
N-Nitrosodiphenylamine	ug/l	10						1.1 J
Phenol	ug/l	2000						
Tentatively Identified Compounds (TICs)								
.gamma. Dodecalactone	ug/l							
1,4-Dioxane	ug/l	0.4						
2(3H)-Benzothiazolone	ug/l							
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9	ug/l							
Benzene, 2-ethenyl-1,4-dimethyl-	ug/l							
Benzenesulfonamide, N-butyl-	ug/l							
Benzenesulfonamide, N-cyclohexyl-4-m	ug/l						6.9 NJ	7.2 NJ
Benzoic Acid	ug/l	30000						
Cyclic octaatomic sulfur	ug/l							
Cyclohexene, 1-methyl-4-(1-methylether	ug/l							
Diethyltoluamide	ug/l							
Dodecanoic acid	ug/l							
Ethanol, 1-(2-butoxyethoxy)-	ug/l							
Ethanol, 2-(2-butoxyethoxy)-	ug/l							
Ethanol, 2-butoxy-	ug/l							
Hexadecanoic acid, butyl ester	ug/l							
Indolizine	ug/l							
Naphthalene, 2,3-dimethyl-	ug/l							
Propanedioic acid, phenyl-	ug/l							
Sulfur	ug/l							
Unknown	ug/l				150 NJ			
Vanillin	ug/l							
PCBs								
None	ug/l							

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.026 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 5C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-25	OB-27	OB-30A	OB-30B	OB-30C	OB-31	OB-32	RW-11D (262-267)	RW-11S (236-241)	RW-13 (100-120)	RW-13 (150-170)	RW-13 (71-91)
Aluminum	mg/L	0.2	0.109	0.0675	0.195	0.046	0.0261 J	0.649	1.96	0.594	0.0522	0.0403	0.224	0.0373 J	0.0521	9.82	0.084	2.5	0.0918	0.094
Aluminum Dissolved	mg/L	0.2	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	10.2	0.015 U	2.6	0.015 U	0.015 U
Antimony	mg/L	0.006	0.00062 U	0.00062 U	0.00062 U	0.00075 J	0.00062 U	0.00062 U	0.0014 UB	0.00062 U	0.0013 J	0.00062 U	0.00062 J	0.00062 U	0.00062 U	0.0024	0.0021	0.0018 J	0.0014 J	0.00062 J
Antimony Dissolved	mg/L	0.006	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
Arsenic	mg/L	0.003	0.0258	0.00098 J	0.00082 J	0.00077 J	0.0011 J	0.00077 U	0.0011 J	0.0254	0.00077 U	0.00077 U	0.00095 J	0.015	0.0148	0.00093 J	0.00077 U	0.0027	0.00077 U	0.00077 U
Arsenic Dissolved	mg/L	0.003	0.00077 U	0.00082 J	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00079 J	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.0036	0.00077 U	0.00077 U
Barium	mg/L	6	0.0929	0.0265	0.103	0.132	0.0622	0.0072	0.038	0.0682	0.0317	0.0241	0.0244	0.0368	0.0464	0.0804	0.0179	0.009	0.0041	0.0135
Barium Dissolved	mg/L	6	0.045	0.0011 U	0.098	0.0971	0.0365	0.0034 J	0.0286	0.0467	0.0242	0.0249	0.0155	0.0263	0.0262	0.0498	0.0172	0.0115	0.0048	0.0111
Beryllium	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Beryllium Dissolved	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Cadmium	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Cadmium Dissolved	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Calcium	mg/L		55.8	21.4	15.6	19.4	40.4	10.3	39.1	33.3	20.6	18.8	48.8	21.4	30.2	127	16.7	16.4	27	44.6
Calcium Dissolved	mg/L		54.3	21.9	16.3	17.6	37.6	11.1	37.9	34.8	17.3	19.7	42.8	20.9	29.9	86.6	16.4	15.4	25.1	39.3
Chromium	mg/L	0.07	0.0013 U	0.0013 U	0.0014 J	0.0013 U	0.0013 U	0.0014 J	0.003 J	0.0014 J	0.0013 U	0.0013 U	0.0013 J	0.0013 U	0.0013 U	0.0039 J	0.0013 U	0.0013 U	0.0013 U	0.0015 J
Chromium Dissolved	mg/L	0.07	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Cobalt	mg/L	0.1	0.0025 J	0.0013 U	0.0013 U	0.0013 U	0.0215	0.0013 U	0.0014 J	0.0044	0.0013 U	0.0017 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Cobalt Dissolved	mg/L	0.1	0.0019 J	0.0013 U	0.0013 U	0.0013 U	0.0184	0.0013 U	0.0013 U	0.0033 J	0.0013 U	0.0013 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 J	0.0013 U	0.0013 U	0.0013 U
Copper	mg/L	1.3	0.0019 U	0.0019 U	0.0045	0.0031 J	0.0042	0.0095	0.0152	0.0036 J	0.0065	0.0028 J	0.0079	0.0019 U	0.0019 U	0.0032 J	0.0084	0.0029 J	0.0019 U	0.0044
Copper Dissolved	mg/L	1.3	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0083	0.0019 U	0.0025 J	0.002 J	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U
Cyanide, Total	mg/L	0.1	0.0061 J	0.002 U	0.0025 J	0.002 U	0.002 U	0.002 U	0.002 U	0.0056 J	0.002 U	0.0022 J	0.002 U	0.0049 J	0.0072 J	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Iron	mg/L	0.3	76.1	0.423	22.1	19.9	31.5	1.19	2.76	52.3	0.694	0.0596 J	0.375	41.3	51.7	0.0856 J	0.709	3.2	0.101 J	0.209
Iron Dissolved	mg/L	0.3	8.22	0.0457 U	0.0457 U	0.0457 U	3.84	0.0457 U	0.0457 U	6.62	0.0457 U	0.0457 U	0.0457 U	2.26	2.95	0.0457 U	0.0979 J	0.0613 J	0.0457 U	0.0457 U
Lead	mg/L	0.005	0.00037 U	0.00037 U	0.0018	0.00041 UB	0.00043 UB	0.0007 J	0.0018	0.0011 J	0.00037 U	0.00037 U	0.00046 UB	0.00037 U	0.00037 U	0.00059 UB	0.00044 UB	0.0011 UB	0.00066 UB	0.00037 U
Lead Dissolved	mg/L	0.005	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U
Magnesium	mg/L		7.78	6.19	3.18	2.49	8.21	5.03	9.2	4.82	4.73	4.8	19	3.79	4.41	0.0657 U	2.23	0.154 J	6.53	17
Magnesium Dissolved	mg/L		6.52	5.44	2.83	1.98	6.76	4.55	7.35	4.23	3.49	4.31	16	3.25	3.82	0.0657 U	2.24	0.0657 U	7.22	13.3
Manganese	mg/L	0.05	10.8	2.38	0.316	0.352	5.82	0.0879	0.0675	6.35	0.0065 J	1.22	0.109	4.68	6.24	0.0027 U	0.504	0.0116	0.0071 J	0.016
Manganese Dissolved	mg/L	0.05	9.95	0.147	0.291	0.311	5.66	0.0027 U	0.0029 J	6.74	0.0027 U	1.18	0.0778	4.66	6.31	0.0027 U	0.525	0.0027 U	0.0106	0.01
Mercury	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.0021	0.00012 U	0.00012 U	0.00012 U
Mercury Dissolved	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.0011	0.00012 U	0.00012 U	0.00012 U
Nickel	mg/L	0.1	0.0013 U	0.0061	0.0014 J	0.0019 J	0.0042	0.0025 J	0.0046	0.0034 J	0.002 J	0.0029 J	0.0013 U	0.0013 U	0.0013 U	0.0095	0.0112	0.015	0.006	0.0014 J
Nickel Dissolved	mg/L	0.1	0.0013 U	0.0013 U	0.0013 U	0.0013 J	0.0034 J	0.0013 U	0.0017 J	0.0014 J	0.0013 U	0.0021 J	0.0013 U	0.0013 U	0.0013 U	0.0092	0.0013 U	0.0033 J	0.0066	0.0013 U
Potassium	mg/L		2.95	0.704	1.18	2.09	2.43	1.12	8.01	1.87	3.44	2.78	1.85	1.29	2.22	38.1	1.6	81.5	1.65	3.27
Potassium Dissolved	mg/L		2.83	0.695	1.19	1.86	2.23	0.994	7.67	1.84	2.87	2.8	1.56	1.25	2.19	34.1	1.48	78.4	1.48	2.8
Selenium	mg/L	0.04	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.0027 J	0.00069 U	0.00069 U	0.0018 J	0.00069 U	0.0045 J	0.00069 U	0.00069 U
Selenium Dissolved	mg/L	0.04	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.0023 J	0.00069 U	0.00069 U	0.0178	0.00069 U	0.0067 J	0.00069 U	0.00069 U
Silver	mg/L	0.04	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Silver Dissolved	mg/L	0.04	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Sodium	mg/L	50	4.15	4.32	3.35	3.75	4.32	4.06	68	3.66	26.1	23.1	7.21	3.51	3.82	147	3.43	95.5	5.18	17
Sodium Dissolved	mg/L	50	3.24	3.54	2.81	2.8	3.32	3.39	59.2	2.93	18.7	20.9	5.39	2.78	3.05	175	3.38	104	5.15	12.9
Thallium	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Thallium Dissolved	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Vanadium	mg/L		0.0012 U	0.002 J	0.0028 J	0.0014 J	0.0012 U	0.0012 J	0.0039 J	0.0016 J	0.0012 U	0.0012 U	0.0052	0.0012 U	0.0012 U	0.0013 J	0.0012 U	0.0157	0.0012 J	0.0012 U
Vanadium Dissolved	mg/L		0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0038 J	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0145	0.0012 U	0.0012 U
Zinc	mg/L	2	0.0054 U	0.0054 U	0.0177	0.0116 J	0.0054 U	0.0072 J	0.0175	0.0092 J	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0093 J	0.0069 J	0.0261	0.0137 J	0.0054 U
Zinc Dissolved	mg/L	2	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.014 J	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.013 J	0.0054 U
Wet Chemistry																				
Alkalinity	mg/l		227	71	57.9	96.1	196	45.4	138	159	77.5	73.9	138	91.7	128	573	52.7	250	102	129
Bicarbonate Alkalinity as CaCO3	mg/l		227	71	57.9	96.1	196	45.4	138	159	77.5	73.9	138	91.7	128	5 U	52.7	5 U	84.2	129
Chloride	mg/l	250	2.05	1.79	1.51	2.45	2.19	1.66	86.5 D	2.04	21.6 D	20.1 D	33.6 D	1.6	2.21	33.1 D	0.95	20 D	5.71 D	40.6 D
Sulfate	mg/l	250	0.33 U	12.2	2.03	1.65	0.33 U	7.63	10.3	0.33 U	12.8	14.7	28.5	0.33 U	0.33 U	3.1	7.53	74.1 D	12.2	19.3

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)
NA - Not Analyzed-Insufficient Sample Volume

TABLE 5C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	RW-13 (71-91) DUP	RW-14D (175-185)	RW-14S (135-155)	RW-15D (127-137)	RW-15S (110-120)	RW-15S(110-120) DUP	RW-3 (77-87)	RW-3DD	RW-3DS	RW-4 (333-343)	RW-4 (393-403)	RW-4A (113-123)	RW-4A (62-72)	RW-5	RW-5A	RW-6	RW-6A	RW-7	SC-01
Aluminum	mg/L	0.2	0.0927	0.015 U	0.015 U	0.105	0.0878	0.0861	0.015 U	0.132	0.0443	0.79	0.272	0.0183 J	0.163	1.46	0.0691	0.0181 J	0.048	0.224	0.0577
Aluminum Dissolved	mg/L	0.2	0.015 U	0.015 U	0.015 U	0.0878	0.0468	0.0592	0.015 U	0.0402	0.042	0.824	0.015 U	0.015 U	0.015 U	0.296	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
Antimony	mg/L	0.006	0.00067 J	0.0021	0.00065 J	0.0021	0.0024	0.0022	0.0017 J	0.0022	0.0023	0.0017 J	0.0017 J	0.0015 J	0.0015 J	0.00084 J	0.00062 U	0.00069 J	0.00094 J	0.00062 U	0.00072 J
Antimony Dissolved	mg/L	0.006	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
Arsenic	mg/L	0.003	0.00077 U	0.0052	0.0014 J	0.0068	0.0235	0.0208	0.00077 U	0.0188	0.0124	0.00082 J	0.00077 U	0.00077 U	0.00077 U	0.0143	0.0021	0.0011 J	0.00077 U	0.00077 U	0.00077 U
Arsenic Dissolved	mg/L	0.003	0.00077 U	0.0013 J	0.0021	0.0082	0.031	0.0283	0.00077 U	0.0171	0.0157	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.0169	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U
Barium	mg/L	6	0.0136	0.0334	0.0095	0.0167	0.0052	0.0048	0.0553	0.0069	0.0113	0.0173	0.0182	0.0144	0.0046	0.0078 B	0.0085	0.35	0.0352	0.0023 J	0.361
Barium Dissolved	mg/L	6	0.0096	0.0247	0.0096	0.0168	0.0052	0.0048	0.0514	0.0041	0.0113	0.0159	0.0141	0.0141	0.0039 J	0.0071 B	0.0078	0.228	0.0242	0.0016 J	0.291
Beryllium	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Beryllium Dissolved	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Cadmium	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Cadmium Dissolved	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Calcium	mg/L		43.7	62.2	44.2	82.3	39.8	38.6	72.3	20.2	43.1	52	19.1	12.3	9.18	9.56	39.8	69.2	72.4	10.6	25.6
Calcium Dissolved	mg/L		39.1	62.8	43.5	79.5	40.3	37	68	7.93	40	34.1	17.1	11.9	8.68	7.52	42	66.9	73.3	11.3	24.4
Chromium	mg/L	0.07	0.0016 J	0.0013 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0161	0.0013 U	0.0013 U	0.0013 U	0.0027 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0073
Chromium Dissolved	mg/L	0.07	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.016	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Cobalt	mg/L	0.1	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0029 J	0.0098	0.0013 U	0.0026 J
Cobalt Dissolved	mg/L	0.1	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0022 J	0.0073	0.0013 U	0.0021 J
Copper	mg/L	1.3	0.0099	0.0025 J	0.0019 U	0.0019 U	0.0019 U	0.002 J	0.0022 J	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0048	0.0091	0.0019 U	0.0041	0.0052	0.0024 J	0.0031 J
Copper Dissolved	mg/L	1.3	0.0019 U	0.0022 J	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0044	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U
Cyanide, Total	mg/L	0.1	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Iron	mg/L	0.3	0.202	12.2	0.0588 J	0.0773 J	0.0716 J	0.0457 U	0.0457 U	0.161	0.0457 U	0.0457 U	0.158	0.0457 U	0.22	1.99	1	41.2	13.2	0.611	54.6
Iron Dissolved	mg/L	0.3	0.0457 U	0.0457 U	0.0457 U	0.0551 J	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	4.79	1.06	0.0457 U	5.97
Lead	mg/L	0.005	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00051 UB	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00046 UB	0.00076 UB	0.0016 UB	0.0031	0.00037 U	0.00037 U	0.00037 U	0.00038 J	0.0057
Lead Dissolved	mg/L	0.005	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U
Magnesium	mg/L		16.9	11.2	11.9	0.0965 J	1.34	2.12	19.4	0.906	0.0657 U	0.0657 U	6.34	4.68	3.86	0.915	5.95	12.2	18.8	4.23	3.56
Magnesium Dissolved	mg/L		13.2	14.3	12.3	0.109 J	1.14	2.05	20	1.27	0.0657 U	0.0657 U	6.1	4.85	3.82	0.0657 U	5.37	10.4	17.1	3.86	3.36
Manganese	mg/L	0.05	0.0159	0.556	0.0602	0.0027 U	0.0027 U	0.0027 U	0.439	0.0048 J	0.0027 U	0.0027 U	0.0089	0.0027 U	0.0034 J	0.0712	0.293	5.37	9.8	0.0065 J	0.458
Manganese Dissolved	mg/L	0.05	0.0095	0.552	0.0464	0.0027 U	0.0027 U	0.0027 U	0.428	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.212	5.37	11.3	0.0027 U	0.434
Mercury	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Mercury Dissolved	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Nickel	mg/L	0.1	0.0015 J	0.0013 U	0.0013 U	0.0084	0.0049	0.0028 J	0.0014 J	0.004	0.003 J	0.0013 U	0.0013 J	0.024	0.03	0.0037 J	0.0013 U	0.0013 J	0.0022 J	0.0013 U	0.0113
Nickel Dissolved	mg/L	0.1	0.0013 U	0.0013 U	0.0013 U	0.008	0.0015 J	0.0013 U	0.0016 J	0.0022 J	0.0021 J	0.0013 U	0.0013 U	0.0234	0.0347	0.0029 J	0.0013 U	0.0013 U	0.0016 J	0.0013 U	0.009
Potassium	mg/L		3.29	5.22	2.96	22.3	4.33	3.81	2.5	13.4	32.8	4.4	7.25	1.52	1.3	99.1	4.08	3	2.44	0.967	1.97
Potassium Dissolved	mg/L		2.82	5.1	2.83	20.1	4.22	3.56	2.19	16.6	28.4	4.16	3.6	1.36	1.14	104	4.21	2.84	2.34	0.946	1.9
Selenium	mg/L	0.04	0.00069 U	0.00069 U	0.00069 UJ	0.0052 J	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.002 J	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U
Selenium Dissolved	mg/L	0.04	0.00069 U	0.00069 U	0.00069 U	0.0126	0.0014 J	0.0012 J	0.00069 U	0.00069 U	0.0029 J	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U
Silver	mg/L	0.04	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0186	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Silver Dissolved	mg/L	0.04	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Sodium	mg/L	50	16.9	202	43.6	148	55.7	41.4	8.1	34.1	177	15.5	8.54	5.8	5.42	76.1	4.45	9.31	10.5	4.16	3.67
Sodium Dissolved	mg/L	50	12.7	196	46.8	148	63.3	49.8	13.2	38.4	194	16.3	7.83	6.14	5.61	71.6	3.72	7.97	7.17	3.43	2.98
Thallium	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Thallium Dissolved	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Vanadium	mg/L		0.0013 J	0.0022 J	0.0018 J	0.0363	0.0102	0.008	0.0015 J	0.0038 J	0.0064	0.0134	0.0012 U	0.0012 U	0.0012 U	0.0026 J	0.0012 U	0.0012 U	0.0021 J	0.0012 U	0.0032 J
Vanadium Dissolved	mg/L		0.0012 U	0.0012 U	0.0014 J	0.0356	0.011	0.0084	0.0012 U	0.0026 J	0.0057	0.0137	0.0012 U	0.0012 U	0.0012 U	0.0022 J	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U
Zinc	mg/L	2	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0107 J	0.0054 U	0.0054 U	0.0084 J	0.0176	0.0205	0.0632	0.0054 U	0.0054 U	0.0072 J	0.0072 J	0.0561
Zinc Dissolved	mg/L	2	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.014 J	0.0174	0.0449	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0445
Wet Chemistry																					
Alkalinity	mg/l		129	307	190	204	98	97.2	259	77.2	98.7	122	66.2	46.9	37.4	288	129	301	306	42.3	152
Bicarbonate Alkalinity as CaCO3	mg/l		129	307	190	5 U	9.7	18.7	259	5 U	5 U	5 U	66.2	46.9	37.4	5 U	129	301	306	42.3	152
Chloride	mg/l	250	38.5 D	62.7 D	36.7 D	26.3 D	10.8 D	12.5 D	7.4 D	10.3 D	31.8 D	3.42	1.94	1.9	2.12	2.45	1.9	7.5 D	3.5	1.79	1.97
Sulfate	mg/l	250	19.2	223 D	1.92	232 D	102 D	111 D	5.28	29.5	361 D	29.7	18.4	15.2	9.31	22.7	8.72	1.21	0.64	8.93	0.62

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)
NA - Not Analyzed-Insufficient Sample Volume

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-25	OB-27	OB-30A	OB-30B	OB-30C	OB-31	OB-32	RW-11D (262-267)	RW-11S (236-241)	RW-13 (100-120)	RW-13 (150-170)	RW-13 (71-91)	RW-13 (71-91) DUP	RW-14D (175-185)
1,1,1-Trichloroethane	ug/l	30	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-Tetrachloroethane	ug/l	1	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l		0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	ug/l	3	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1-Dichloroethane	ug/l	50	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	3.1	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloroethene	ug/l	1	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2,3-Trichlorobenzene	ug/l		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2,3-Trichloropropane	ug/l	0.03	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
1,2,4-Trichlorobenzene	ug/l	9	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-Dibromo-3-Chloropropane	ug/l	0.02	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichlorobenzene	ug/l	600	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloroethane	ug/l	2	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.45 J	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloropropane	ug/l	1	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	ug/l	600	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,4-Dichlorobenzene	ug/l	75	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
2-Butanone (MEK)	ug/l	300	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.5 J	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Hexanone	ug/l	40	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
4-Methyl-2-pentanone (MIBK)	ug/l		2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Acetone	ug/l	6000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	39	5 U	14	5 U	5 U	5 U	5 U
Benzene	ug/l	1	2	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	3.3	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	11	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Bromoform	ug/l	4	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
Bromomethane	ug/l	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l	700	0.16 U	0.26 UB	0.23 UB	0.16 U	0.16 U	0.27 UB	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	10	0.16 U	1.3	0.52 J	0.16 U	0.16 U	0.82 J
Carbon tetrachloride	ug/l	1	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Chlorobenzene	ug/l	50	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	4.8	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Chlorobromomethane	ug/l		0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Chlorodibromomethane	ug/l	1	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chloroethane[1]	ug/l	5	27	0.32 U	1.2	0.32 U	1.1	0.32 U	0.32 U	180	0.32 U	0.32 U	0.32 U	6.4	0.32 U	5.5	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.6 J
Chloroform	ug/l	70	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	ug/l		0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/l	70	0.35 J	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 J	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
cis-1,3-Dichloropropene	ug/l		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	ug/l		2.4	0.32 U	0.32 U	0.32 U	0.87 J	0.32 U	0.32 U	1.4	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Dichlorobromomethane	ug/l	1	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Dichlorodifluoromethane	ug/l	1000	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Ethylbenzene	ug/l	700	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Ethylene Dibromide	ug/l	0.03	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	ug/l	700	0.75 J	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	3.2	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.95 J	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Methyl acetate	ug/l	7000	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Methyl tert-butyl ether	ug/l	70	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
Methylcyclohexane	ug/l		0.67 J	0.26 U	0.26 U	0.26 U	0.47 J	0.26 U	0.26 U	0.93 J	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Methylene Chloride	ug/l	3	0.32 U	0.34 UB	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	1.1 B	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.4 J	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Styrene	ug/l	100	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Tetrachloroethene	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	ug/l	600	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.48 J	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.41 J	0.38 U	0.38 U	0.38 U	0.38 U
trans-1,2-Dichloroethene	ug/l	100	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
trans-1,3-Dichloropropene	ug/l		0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
Trichloroethene	ug/l	1	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Trichlorofluoromethane	ug/l	2000	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	ug/l	1	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.29 J	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Xylenes, Total	ug/l	1000	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	7.4	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-25	OB-27	OB-30A	OB-30B	OB-30C	OB-31	OB-32	RW-11D (262-267)	RW-11S (236-241)	RW-13 (100-120)	RW-13 (150-170)	RW-13 (71-91)	RW-13 (71-91) DUP	RW-14D (175-185)
Tentatively Identified Compounds (TICs)																						
1H-Indene, 2,3-dihydro-1,3-dimethyl-	ug/l													9.6 NJ								
1H-Indene, 2,3-dihydro-1,6-dimethyl-	ug/l		19 NJ							28 NJ												
1H-Indene, 2,3-dihydro-5-methyl-	ug/l									46 NJ												
1-Pentanol, 2-ethyl-4-methyl-	ug/l																	7 NJ				
1-Phenyl-1-butene	ug/l		11 NJ																			
1-Propene, 2-methyl-	ug/l															9.1 NJ						
Benzene, 1,2,3,5-tetramethyl-	ug/l									21 NJ												
Benzene, 1,2,3-trimethyl-	ug/l																					
Benzene, 1,2,4,5-tetramethyl-	ug/l		14 NJ																			
Benzene, 1-ethyl-2,4-dimethyl-	ug/l		6 NJ																			
Benzene, 1-methyl-2-(1-methylethyl)-	ug/l									15 NJ												
Benzene, 2-ethenyl-1,4-dimethyl-	ug/l		23 NJ																			
Cyclopentane, methyl-	ug/l		17 NJ																			
Ethanethiol	ug/l																5.1 NJ					
Indane	ug/l		12 NJ				5.2 NJ			24 NJ												
Naphthalene	ug/l	300								10 NJ												
Unknown	ug/l		5.8 NJ							13 NJ				6.1 NJ								

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)
[1] Interim Groundwater Quality Criteria

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	RW-14S (135-155)	RW-15D (127-137)	RW-15S (110-120)	RW-15S(110-120) DUP	RW-3 (77-87)	RW-3DD (175-180)	RW-3DS	RW-4 (333-343)	RW-4 (393-403)	RW-4A (113-123)	RW-4A (62-72)	RW-5	RW-5A	RW-6	RW-6A	RW-7	SC-01
1,1,1-Trichloroethane	ug/l	30	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-Tetrachloroethane	ug/l	1	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l		0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	ug/l	3	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1-Dichloroethane	ug/l	50	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	2.7	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.4 J	0.32 J	0.26 U	0.26 U
1,1-Dichloroethene	ug/l	1	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2,3-Trichlorobenzene	ug/l		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2,3-Trichloropropane	ug/l	0.03	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
1,2,4-Trichlorobenzene	ug/l	9	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-Dibromo-3-Chloropropane	ug/l	0.02	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichlorobenzene	ug/l	600	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloroethane	ug/l	2	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloropropane	ug/l	1	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	ug/l	600	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,4-Dichlorobenzene	ug/l	75	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
2-Butanone (MEK)	ug/l	300	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Hexanone	ug/l	40	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
4-Methyl-2-pentanone (MIBK)	ug/l		2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Acetone	ug/l	6000	5 U	41	12	9	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	ug/l	1	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	1.3	0.9 J	0.43 U	1.6
Bromoform	ug/l	4	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
Bromomethane	ug/l	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l	700	0.54 J	11	4.3	2.4	1.1	9.2	17	0.76 J	0.64 J	0.48 J	0.61 J	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	ug/l	1	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Chlorobenzene	ug/l	50	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Chlorobromomethane	ug/l		0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Chlorodibromomethane	ug/l	1	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chloroethane[1]	ug/l	5	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	1.2	0.32 U	3.5	1.4	0.32 U	1.3
Chloroform	ug/l	70	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	ug/l		0.14 U	0.48 J	0.42 J	0.14 U	0.14 U	0.14 U	0.14 U	1.1	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/l	70	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
cis-1,3-Dichloropropene	ug/l		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	ug/l		0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.36 J	0.42 J	0.32 U	1.5
Dichlorobromomethane	ug/l	1	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Dichlorodifluoromethane	ug/l	1000	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.58 J
Ethylbenzene	ug/l	700	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.44 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.34 J
Ethylene Dibromide	ug/l	0.03	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	ug/l	700	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	1.5
Methyl acetate	ug/l	7000	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Methyl tert-butyl ether	ug/l	70	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
Methylcyclohexane	ug/l		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.28 J	0.26 U	0.26 U	1.2
Methylene Chloride	ug/l	3	0.32 J	0.32 U	0.44 J	0.45 J	0.32 U	0.32 U	0.33 J	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Styrene	ug/l	100	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Tetrachloroethene	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	ug/l	600	0.38 U	1.5	1	0.84 J	0.38 U	0.38 U	0.46 J	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	1	0.38 U	0.38 U	0.43 J
trans-1,2-Dichloroethene	ug/l	100	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
trans-1,3-Dichloropropene	ug/l		0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
Trichloroethene	ug/l	1	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Trichlorofluoromethane	ug/l	2000	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	ug/l	1	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Xylenes, Total	ug/l	1000	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.67 J	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	66

TABLE 5D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	RW-14S (135-155)	RW-15D (127-137)	RW-15S (110-120)	RW-15S(110-120) DUP	RW-3 (77-87)	RW-3DD (175-180)	RW-3DS	RW-4 (333-343)	RW-4 (393-403)	RW-4A (113-123)	RW-4A (62-72)	RW-5	RW-5A	RW-6	RW-6A	RW-7	SC-01
Tentatively Identified Compounds (TICs)																			
1H-Indene, 2,3-dihydro-1,3-dimethyl-	ug/l																		
1H-Indene, 2,3-dihydro-1,6-dimethyl-	ug/l																		
1H-Indene, 2,3-dihydro-5-methyl-	ug/l																		
1-Pentanol, 2-ethyl-4-methyl-	ug/l																		
1-Phenyl-1-butene	ug/l																		
1-Propene, 2-methyl-	ug/l																		
Benzene, 1,2,3,5-tetramethyl-	ug/l																		5.9 NJ
Benzene, 1,2,3-trimethyl-	ug/l																		8.2 NJ
Benzene, 1,2,4,5-tetramethyl-	ug/l																		
Benzene, 1-ethyl-2,4-dimethyl-	ug/l																		
Benzene, 1-methyl-2-(1-methylethyl)-	ug/l																		
Benzene, 2-ethenyl-1,4-dimethyl-	ug/l																		7 NJ
Cyclopentane, methyl-	ug/l																		
Ethanethiol	ug/l							9.5 NJ											
Indane	ug/l																		
Naphthalene	ug/l	300																	
Unknown	ug/l																		

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)
[1] Interim Groundwater Quality Criteria

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-25	OB-27	OB-30A	OB-30B	OB-30C	OB-31	OB-32	RW-11D (262-267)	RW-11S (236-241)	RW-13 (100-120)	RW-13 (150-170)	RW-13 (71-91)	RW-13 (71-91) DUP	RW-14D (175-185)
1,1'-Biphenyl	ug/l	400	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2,4,5-Tetrachlorobenzene	ug/l		1.3 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dioxane	ug/l	0.4	3.7	0.016 U	0.97	0.28 B	0.59 B	0.016 U	0.016 U	17	0.34 B	0.016 U	0.31 B	1.1	0.016 U	41	0.9	0.016 U	0.016 U	0.5 B	0.45 B	0.36
2,2'-oxybis[1-chloropropane]	ug/l	300	0.66 U	0.63 U	0.66 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.66 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
2,3,4,6-Tetrachlorophenol	ug/l	200	0.78 U	0.75 U	0.78 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.78 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
2,4,5-Trichlorophenol	ug/l	700	0.29 U	0.28 U	0.29 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.29 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
2,4,6-Trichlorophenol	ug/l	20	0.31 U	0.3 U	0.31 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.31 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2,4-Dichlorophenol	ug/l	20	0.44 U	0.42 U	0.44 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.44 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
2,4-Dimethylphenol	ug/l	100	0.25 U	0.24 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
2,4-Dinitrophenol	ug/l	40	15 U	14 U	15 U	14 U	14 U	14 U	14 U	14 U	14 U	15 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/l		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/l		0.41 U	0.39 U	0.41 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.41 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
2-Chloronaphthalene	ug/l	600	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Chlorophenol	ug/l	40	0.39 U	0.38 U	0.39 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.39 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
2-Methylnaphthalene	ug/l	30	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2-Methylphenol	ug/l		0.27 U	0.26 UJ	0.27 U	0.26 U	0.26 U	0.26 UJ	0.26 UJ	0.26 U	0.26 UJ	0.27 U	0.26 U	0.26 UJ	0.26 UJ	0.26 U	0.26 U	0.26 U	0.26 U	0.26 UJ	0.26 UJ	0.26 U
2-Nitroaniline	ug/l		0.49 U	0.47 U	0.49 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.49 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
2-Nitrophenol	ug/l		0.78 U	0.75 U	0.78 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.78 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
3,3'-Dichlorobenzidine	ug/l	30	1.5 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
3-Nitroaniline	ug/l		1 U	0.96 U	1 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	1 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
4,6-Dinitro-2-methylphenol	ug/l	1	14 U	13 U	14 U	13 U	13 U	13 U	13 U	13 U	13 U	14 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U
4-Bromophenyl phenyl ether	ug/l		0.78 U	0.75 U	0.78 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.78 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
4-Chloro-3-methylphenol	ug/l	100	0.6 U	0.58 U	0.6 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.6 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
4-Chloroaniline	ug/l		2 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Chlorophenyl phenyl ether	ug/l		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methylphenol	ug/l		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
4-Nitroaniline	ug/l		0.57 U	0.54 U	0.57 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.57 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
4-Nitrophenol	ug/l		0.72 U	0.69 U	0.72 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.72 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Acenaphthene	ug/l	400	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Acenaphthylene	ug/l	100	0.86 U	0.82 U	0.86 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.86 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
Acetophenone	ug/l	700	0.82 U	0.79 U	0.82 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.82 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
Anthracene	ug/l	2000	0.66 U	0.63 U	0.66 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.66 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Atrazine	ug/l	3	1.4 U	1.3 U	1.4 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U	1.3 U	1.3 U	1.3 UJ	1.3 UJ	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Benzaldehyde	ug/l		0.62 U	0.59 U	0.62 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.62 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Benzo[a]anthracene	ug/l	0.1	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
Benzo[a]pyrene	ug/l	0.1	0.023 U	0.022 U	0.023 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.023 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U
Benzo[b]fluoranthene	ug/l	0.2	0.025 U	0.024 U	0.025 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.025 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
Benzo[g,h,i]perylene	ug/l	100	1.5 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Benzo[k]fluoranthene	ug/l	0.5	0.7 U	0.67 U	0.7 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.7 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
Bis(2-chloroethoxy)methane	ug/l		0.25 U	0.24 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Bis(2-chloroethyl)ether	ug/l	7	0.027 U	0.026 U	0.027 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.031	0.027 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U
Bis(2-ethylhexyl) phthalate	ug/l	3	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Butyl benzyl phthalate	ug/l	100	0.89 U	0.85 U	0.89 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.89 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U
Caprolactam	ug/l	5000	0.71 U	0.68 UJ	0.71 U	0.68 U	0.68 U	0.68 UJ	0.68 U	0.68 U	0.68 UJ	0.71 U	0.68 U	0.68 UJ	0.68 UJ	0.68 R	0.68 R	0.68 U	0.68 U	0.68 UJ	0.68 UJ	0.68 U
Carbazole	ug/l		0.71 U	0.68 U	0.71 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.71 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Chrysene	ug/l	5	0.94 U	0.91 U	0.94 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.94 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Dibenz(a,h)anthracene	ug/l	0.3	0.012 U	0.011 U	0.012 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.012 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
Dibenzofuran	ug/l		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Diethyl phthalate	ug/l	6000	1 U	0.98 U	1 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	1 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
Dimethyl phthalate	ug/l	100	0.8 U	0.77 U	0.8 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.8 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U
Di-n-butyl phthalate	ug/l	700	0.88 U	0.84 U	0.88 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.88 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Di-n-octyl phthalate	ug/l	100	5 U	4.8 U	5 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	5 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Fluoranthene	ug/l	300	0.88 U	0.84 U	0.88 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.88 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Fluorene	ug/l	300	0.95 U	0.91 U	0.95 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.95 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Hexachlorobenzene	ug/l	0.02	0.014 U	0.013 U	0.014 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.027 *	0.014 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.026 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-25	OB-27	OB-30A	OB-30B	OB-30C	OB-31	OB-32	RW-11D (262-267)	RW-11S (236-241)	RW-13 (100-120)	RW-13 (150-170)	RW-13 (71-91)	RW-13 (71-91) DUP	RW-14D (175-185)
Hexachlorobutadiene	ug/l	1	0.81 U	0.78 U	0.81 U	0.78 UJ	0.78 UJ	0.78 U	0.78 U	0.78 U	0.78 U	0.81 U	0.78 UJ	0.78 U	0.78 U	0.78 U	0.78 U	0.78 UJ	0.78 UJ	0.78 U	0.78 U	0.78 UJ
Hexachlorocyclopentadiene	ug/l	40	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Hexachloroethane	ug/l	7	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Indeno[1,2,3-cd]pyrene	ug/l	0.2	0.038 U	0.036 U	0.038 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.038 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U
Isophorone	ug/l	40	0.83 U	0.8 U	0.83 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.83 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 J	0.8 U	0.8 U	0.8 U	0.8 U
Naphthalene	ug/l	300	1.2 U	1.1 U	1.2 U	1.1 U	1.1 J	1.1 U	1.1 U	3.2 J	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Nitrobenzene	ug/l	6	0.59 U	0.57 U	0.59 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.59 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
N-Nitrosodimethylamine	ug/l	0.8	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
N-Nitrosodi-n-propylamine	ug/l	10	0.45 U	0.43 U	0.45 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.45 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
N-Nitrosodiphenylamine	ug/l	10	0.93 U	0.89 U	0.93 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.93 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U
Pentachlorophenol	ug/l	0.3	0.16 U	0.15 U	0.16 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Phenanthrene	ug/l	100	0.6 U	0.58 U	0.6 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.6 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Phenol	ug/l	2000	0.3 U	0.29 U	0.3 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.29 U	2.5 J	0.29 U	2.8 J	0.29 U	0.29 U	0.29 U	0.29 U
Pyrene	ug/l	200	1.7 U	1.6 U	1.7 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.7 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Tentatively Identified Compounds (TICs)																						
.gamma. Dodecalactone	ug/l																	8 NJ				
1,4-Dioxane	ug/l	0.4														6.4 NJ						
2(3H)-Benzothiazolone	ug/l															7.1 NJ						
7,9-Di-tert-butyl-1-oxaspiro(4,5)dec	ug/l															12 NJ		20 NJ				
Benzene, 2-ethenyl-1,4-dimethyl-	ug/l									9 NJ												
Benzenesulfonamide, N-butyl-	ug/l																					3400 NJ
Benzenesulfonamide, N-cyclohexy	ug/l															7.9 NJ						
Benzoic Acid	ug/l	30000																				
Cyclic octaatomic sulfur	ug/l																					
Cyclohexene, 1-methyl-4-(1-methy	ug/l																					
Diethyltoluamide	ug/l															7.2 NJ		6.8 NJ				
Dodecanoic acid	ug/l																					
Ethanol, 1-(2-butoxyethoxy)-	ug/l																					
Ethanol, 2-(2-butoxyethoxy)-	ug/l																	150 NJ				56 NJ
Ethanol, 2-butoxy-	ug/l																					
Hexadecanoic acid, butyl ester	ug/l				8.8 NJ																	
Indolizine	ug/l																					
Naphthalene, 2,3-dimethyl-	ug/l									7.8 NJ												
Propanedioic acid, phenyl-	ug/l																					
Sulfur	ug/l																					
Unknown	ug/l		11 NJ					140 NJ		7.3 NJ						28 NJ		7 NJ				94 NJ
Vanillin	ug/l																					

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.026 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	RW-14S (135-155)	RW-15D (127-137)	RW-15S (110-120)	RW-15S(110-120) DUP	RW-3 (77-87)	RW-3DD	RW-3DS	RW-4 (333-343)	RW-4 (393-403)	RW-4A (113-123)	RW-4A (62-72)	RW-5	RW-5A	RW-6	RW-6A	RW-7	SC-01
1,1'-Biphenyl	ug/l	400	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2,4,5-Tetrachlorobenzene	ug/l		1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dioxane	ug/l	0.4	0.016 U	0.49	0.016 U	0.016 U	14	12	12	0.016 U	0.016 U	0.016 U	0.016 U	6.8	0.016 U	2.1	3.1	0.016 U	0.45 B
2,2'-oxybis[1-chloropropane]	ug/l	300	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.66 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
2,3,4,6-Tetrachlorophenol	ug/l	200	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.78 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
2,4,5-Trichlorophenol	ug/l	700	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.29 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
2,4,6-Trichlorophenol	ug/l	20	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.31 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2,4-Dichlorophenol	ug/l	20	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.44 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
2,4-Dimethylphenol	ug/l	100	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
2,4-Dinitrophenol	ug/l	40	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	15 U	14 U	14 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/l		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/l		0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.41 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
2-Chloronaphthalene	ug/l	600	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Chlorophenol	ug/l	40	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.39 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
2-Methylnaphthalene	ug/l	30	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2-Methylphenol	ug/l		0.26 UJ	0.26 U	0.26 UJ	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.27 U	0.26 UJ	0.26 U	0.26 U	0.26 UJ	0.26 UJ
2-Nitroaniline	ug/l		0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.49 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
2-Nitrophenol	ug/l		0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.78 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
3,3'-Dichlorobenzidine	ug/l	30	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
3-Nitroaniline	ug/l		0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	1 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
4,6-Dinitro-2-methylphenol	ug/l	1	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	14 U	13 U	13 U	13 U	13 U	13 U
4-Bromophenyl phenyl ether	ug/l		0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.78 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
4-Chloro-3-methylphenol	ug/l	100	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.6 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
4-Chloroaniline	ug/l		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Chlorophenyl phenyl ether	ug/l		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methylphenol	ug/l		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
4-Nitroaniline	ug/l		0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.57 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
4-Nitrophenol	ug/l		0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.72 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Acenaphthene	ug/l	400	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Acenaphthylene	ug/l	100	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.86 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
Acetophenone	ug/l	700	0.79 U	1.4 J	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.82 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
Anthracene	ug/l	2000	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.66 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Atrazine	ug/l	3	1.3 UJ	1.3 UJ	1.3 U	1.3 UJ	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Benzaldehyde	ug/l		0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.62 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Benzo[a]anthracene	ug/l	0.1	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.027 J
Benzo[a]pyrene	ug/l	0.1	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.023 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U
Benzo[b]fluoranthene	ug/l	0.2	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.025 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
Benzo[g,h,i]perylene	ug/l	100	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Benzo[k]fluoranthene	ug/l	0.5	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.7 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
Bis(2-chloroethoxy)methane	ug/l		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Bis(2-chloroethyl)ether	ug/l	7	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.027 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U
Bis(2-ethylhexyl) phthalate	ug/l	3	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Butyl benzyl phthalate	ug/l	100	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.89 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U
Caprolactam	ug/l	5000	0.68 R	0.68 R	0.68 U	0.68 R	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.71 U	0.68 UJ	0.68 U	0.68 U	0.68 UJ	0.68 UJ
Carbazole	ug/l		0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.71 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Chrysene	ug/l	5	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.94 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Dibenz(a,h)anthracene	ug/l	0.3	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.012 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
Dibenzofuran	ug/l		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Diethyl phthalate	ug/l	6000	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	1 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
Dimethyl phthalate	ug/l	100	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.8 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U
Di-n-butyl phthalate	ug/l	700	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.88 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Di-n-octyl phthalate	ug/l	100	4.8 U F	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	5 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Fluoranthene	ug/l	300	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.88 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Fluorene	ug/l	300	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.95 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Hexachlorobenzene	ug/l	0.02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.027 *	0.013 U	0.034 *	0.013 U	0.014 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.026 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 5E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	RW-14S (135-155)	RW-15D (127-137)	RW-15S (110-120)	RW-15S(110-120) DUP	RW-3 (77-87)	RW-3DD	RW-3DS	RW-4 (333-343)	RW-4 (393-403)	RW-4A (113-123)	RW-4A (62-72)	RW-5	RW-5A	RW-6	RW-6A	RW-7	SC-01
Hexachlorobutadiene	ug/l	1	0.78 U	0.78 U	0.78 U	0.78 U	0.78 UJ	0.78 UJ	0.78 UJ	0.78 UJ	0.78 UJ	0.78 UJ	0.78 UJ	0.81 U	0.78 U	0.78 UJ	0.78 UJ	0.78 U	0.78 U
Hexachlorocyclopentadiene	ug/l	40	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Hexachloroethane	ug/l	7	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Indeno[1,2,3-cd]pyrene	ug/l	0.2	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.038 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U
Isophorone	ug/l	40	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.83 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Naphthalene	ug/l	300	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	4.5 J
Nitrobenzene	ug/l	6	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.59 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
N-Nitrosodimethylamine	ug/l	0.8	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
N-Nitrosodi-n-propylamine	ug/l	10	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.45 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
N-Nitrosodiphenylamine	ug/l	10	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.93 U	0.89 U	0.89 U	0.89 U	0.89 U	1.1 J
Pentachlorophenol	ug/l	0.3	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Phenanthrene	ug/l	100	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.6 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Phenol	ug/l	2000	0.29 U	12	0.29 U	0.29 U	0.29 U	0.29 U	4.4 J	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Pyrene	ug/l	200	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.7 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Tentatively Identified Compounds (TICs)																			
.gamma. Dodecalactone	ug/l																		
1,4-Dioxane	ug/l	0.4																	
2(3H)-Benzothiazolone	ug/l																		
7,9-Di-tert-butyl-1-oxaspiro(4,5)dec	ug/l							12 NJ											
Benzene, 2-ethenyl-1,4-dimethyl-	ug/l																		
Benzenesulfonamide, N-butyl-	ug/l		3900 NJ	4100 NJ				6.5 NJ											
Benzenesulfonamide, N-cyclohexy	ug/l															6.9 NJ			7.2 NJ
Benzoic Acid	ug/l	30000		23 NJ															
Cyclic octaatomic sulfur	ug/l		37 NJ																
Cyclohexene, 1-methyl-4-(1-methy	ug/l				11 NJ														
Diethyltoluamide	ug/l			7.5 NJ															
Dodecanoic acid	ug/l			12 NJ															
Ethanol, 1-(2-butoxyethoxy)-	ug/l			68 NJ															
Ethanol, 2-(2-butoxyethoxy)-	ug/l				23 NJ	15 NJ													
Ethanol, 2-butoxy-	ug/l			21 NJ															
Hexadecanoic acid, butyl ester	ug/l																		
Indolizine	ug/l			6.5 NJ															
Naphthalene, 2,3-dimethyl-	ug/l																		
Propanedioic acid, phenyl-	ug/l			16 NJ															
Sulfur	ug/l		22 NJ																
Unknown	ug/l			7.3 NJ											150 NJ				
Vanillin	ug/l			14 NJ															

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.026 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 5F
SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) IN GROUNDWATER
PETERS MINE PIT (PMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-11R	OB-15B	OB-19	OB-20A	OB-20B	OB-21	OB-25	OB-27	OB-30A
PCB-1016	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1221	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1232	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1242	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1248	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1254	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1260	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1262	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1268	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U

Parameter	Result Unit	NJGWQS ug/l	OB-30B	OB-30C	OB-31	OB-32	RW-11D (262-267)	RW-11S (236-241)	RW-13 (100-120)	RW-13 (150-170)	RW-13 (71-91)
PCB-1016	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1221	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1232	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1242	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1248	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1254	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1260	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1262	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1268	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U

Parameter	Result Unit	NJGWQS ug/l	RW-14D (175-185)	RW-14S (135-155)	RW-15D (127-137)	RW-15S (110-120)	15S(110-120) DUP	RW-3 (77-87)	RW-3DD (175-180)	RW-3DS (155-160)	RW-4 (333-343)
PCB-1016	ug/l		0.12 U	0.12 U F	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1221	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1232	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1242	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1248	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1254	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1260	ug/l		0.11 U	0.11 U F	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1262	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1268	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U

Parameter	Result Unit	NJGWQS ug/l	RW-4 (393-403)	RW-4A (113-123)	RW-4A (62-72)	RW-5	RW-5A	RW-6	RW-6A	RW-7	SC-01
PCB-1016	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1221	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1232	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1242	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1248	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1254	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1260	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1262	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1268	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 6A
SUMMARY OF DETECTED ORGANIC COMPOUNDS IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

VOC Parameter	Result Unit	NJGWQS ug/l	OB-16	OB-17	OB-23	OB-24
1,1-Dichloroethane	ug/l	50		0.79 J		
Acetone	ug/l	6000	5.1			
Methylene Chloride	ug/l	3				0.37 UB
VOC Tentatively Identified Compounds (TICs)						
Indane	ug/l				6.3 NJ	

SVOC Parameter	Result Unit	NJGWQS ug/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-23
1,4-Dioxane	ug/l	0.4		0.33		11		
Benzo[a]anthracene	ug/l	0.1					0.082	
Benzo[a]pyrene	ug/l	0.1					0.026 J	
Benzo[b]fluoranthene	ug/l	0.2					0.17	
Dibenz(a,h)anthracene	ug/l	0.3					0.25 *	
Hexachlorobenzene	ug/l	0.02					0.03	
Indeno[1,2,3-cd]pyrene	ug/l	0.2					0.18	
N-Nitrosodiphenylamine	ug/l	10						1 J
SVOC Tentatively Identified Compounds (TICs)								
Cyclohexanamine, N-cyclohexyl-	ug/l		12 NJ					23 NJ
Unknown	ug/l				9.8 NJ			32 NJ
PCBs								
None								

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 6B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-18 DUP	OB-22	OB-23	OB-24	OB-28	OB-33	RW-16
Aluminum	mg/L	0.2	0.0563	0.0426	0.0151 J	0.015 U	0.117	0.0748	0.165	0.0334 J	0.0197 J	1.19	0.412	0.015 U
Aluminum Dissolved	mg/L	0.2	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
Antimony	mg/L	0.006	0.0012 UB	0.00086 UB	0.001 UB	0.001 UB	0.00086 UB	0.00099 UB	0.0014 UB	0.0012 UB	0.00076 UB	0.00068 UB	0.00062 U	0.00086 UB
Antimony Dissolved	mg/L	0.006	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
Arsenic	mg/L	0.003	0.00077 U	0.0012 J	0.0089	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00099 J	0.00077 U	0.00077 U
Arsenic Dissolved	mg/L	0.003	0.00077 U	0.0008 J	0.0021	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U
Barium	mg/L	6	0.418	0.0456	0.104	0.0103	0.0077	0.0071	0.0135	0.373	0.0387	0.0713	0.0228	0.0393
Barium Dissolved	mg/L	6	0.285	0.0384	0.0751	0.0113	0.0073	0.0056	0.0106	0.265	0.0323	0.0657	0.0188	0.0302
Beryllium	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Beryllium Dissolved	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Cadmium	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Cadmium Dissolved	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Calcium	mg/L		105	104	133	92.4	37.7	36.9	31.5	91.5	93.9	124	12.3	66.7
Calcium Dissolved	mg/L		95.3	91.5	121	86.6	34.2	31.6	27.2	87.3	85.1	126	12.6	55.2
Chromium	mg/L	0.07	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 J	0.0015 J	0.0013 U	0.0013 U	0.0013 U	0.0021 J	0.0013 U	0.0013 U
Chromium Dissolved	mg/L	0.07	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Cobalt	mg/L	0.1	0.0013 U	0.0013 U	0.0018 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.002 J	0.0049	0.0013 U
Cobalt Dissolved	mg/L	0.1	0.0013 U	0.0013 U	0.0014 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Copper	mg/L	1.3	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0067	0.0019 U	0.0019 U
Copper Dissolved	mg/L	1.3	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U
Cyanide, Total	mg/L	0.1	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.0063 J	0.002 U	0.002 U	0.002 U	0.002 U
Iron	mg/L	0.3	48.5	0.944	15.9	1.75	0.169	0.108 J	0.226	44.2	0.0467 J	3.26	0.519	0.117 J
Iron Dissolved	mg/L	0.3	9.43	0.0457 U	1.98	0.154	0.0457 U	0.0457 U	0.0457 U	10	0.0457 U	0.0457 U	0.0457 U	0.0457 U
Lead	mg/L	0.005	0.0031	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.0011 J	0.00037 U	0.001 J	0.00037 U	0.00037 U
Lead Dissolved	mg/L	0.005	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U
Magnesium	mg/L		10.3	29	19.1	30.7	8.87	8.82	6.55	10.6	24.4	28.2	5.93	22
Magnesium Dissolved	mg/L		8.3	22.3	15	25.5	6.84	6.24	4.8	8.82	20.1	25.2	5.09	16.5
Manganese	mg/L	0.05	1.88	1.98	3.39	0.308	0.0049 J	0.003 J	0.0047 J	1.62	0.273	3.27	0.0243	0.0027 U
Manganese Dissolved	mg/L	0.05	1.54	1.62	2.98	0.3	0.0027 U	0.0027 U	0.0027 U	1.43	0.022	2.93	0.0027 U	0.0027 U
Mercury	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Mercury Dissolved	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Nickel	mg/L	0.1	0.003 J	0.0014 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0031 J	0.0013 U	0.0013 U
Nickel Dissolved	mg/L	0.1	0.0018 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Potassium	mg/L		5.12	3.22	10.4	0.821	0.432	0.423	1.05	6.84	2.35	3.87	1.06	2.11
Potassium Dissolved	mg/L		4.56	2.78	9.4	0.854	0.388	0.344	0.863	6.44	2.11	3.66	0.944	1.7
Selenium	mg/L	0.04	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00092 J	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U
Selenium Dissolved	mg/L	0.04	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00087 J	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U
Silver	mg/L	0.04	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Silver Dissolved	mg/L	0.04	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Sodium	mg/L	50	17.6	22.3	41.5	15.5	6.02	6.01	23.7	66.4	18	22.4	5.89	20.3
Sodium Dissolved	mg/L	50	14.6 B	17.2 B	35.4	13.3 B	16.4 B	4.36 B	18.2 B	56.8	14.4 B	20 B	4.8	15 B
Thallium	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Thallium Dissolved	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U

TABLE 6B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-18 DUP	OB-22	OB-23	OB-24	OB-28	OB-33	RW-16
Vanadium	mg/L		0.0017 J	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0013 J	0.0012 U	0.003 J	0.002 J	0.0012 U
Vanadium Dissolved	mg/L		0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U
Zinc	mg/L	2	0.021	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0108 J	0.0054 U	0.0076 J	0.0054 U	0.0054 U
Zinc Dissolved	mg/L	2	0.0106 J	0.0054 U	0.0054 U	0.0054 U	0.0056 J	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
Wet Chemistry														
Alkalinity	mg/l		337	337	388	325	153	125	77.9	348	220	326	49.9	207
Bicarbonate Alkalinity as CaCO3	mg/l		337	337	388	325	153	125	77.9	348	220	326	49.9	207
Chloride	mg/l	250	20 D	49.1 D	72.6 D	12.9 D	1.58 F	1.79	38.5 D	63.2 D	73.8 D	108 D	1.73	51.4 D
Sulfate	mg/l	250	0.7	13.2	9.38	36.4 D	9.85	9.84	16.9	2.56	27.4	26.2 D	12.6	12.9

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 6C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-18 DUP	OB-22	OB-23	OB-24	OB-28	OB-33	RW-16
1,1,1-Trichloroethane	ug/l	30	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-Tetrachloroethane	ug/l	1	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l		0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	ug/l	3	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1-Dichloroethane	ug/l	50	0.26 U	0.26 U	0.26 U	0.79 J	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloroethene	ug/l	1	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2,3-Trichlorobenzene	ug/l		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2,3-Trichloropropane	ug/l	0.03	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
1,2,4-Trichlorobenzene	ug/l	9	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-Dibromo-3-Chloropropane	ug/l	0.02	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichlorobenzene	ug/l	600	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloroethane	ug/l	2	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloropropane	ug/l	1	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	ug/l	600	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,4-Dichlorobenzene	ug/l	75	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
2-Butanone (MEK)	ug/l	300	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Hexanone	ug/l	40	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
4-Methyl-2-pentanone (MIBK)	ug/l		2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Acetone	ug/l	6000	5 U	5 U	5.1	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	ug/l	1	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Bromoform	ug/l	4	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
Bromomethane	ug/l	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l	700	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	ug/l	1	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Chlorobenzene	ug/l	50	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Chlorobromomethane	ug/l		0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Chlorodibromomethane	ug/l	1	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chloroethane[1]	ug/l	5	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Chloroform	ug/l	70	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	ug/l		0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/l	70	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
cis-1,3-Dichloropropene	ug/l		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	ug/l		0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Dichlorobromomethane	ug/l	1	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Dichlorodifluoromethane	ug/l	1000	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Ethylbenzene	ug/l	700	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Ethylene Dibromide	ug/l	0.03	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	ug/l	700	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Methyl acetate	ug/l	7000	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Methyl tert-butyl ether	ug/l	70	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
Methylcyclohexane	ug/l		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Methylene Chloride	ug/l	3	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.37 UB	0.32 U	0.32 U	0.32 U
Styrene	ug/l	100	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Tetrachloroethene	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	ug/l	600	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
trans-1,2-Dichloroethene	ug/l	100	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
trans-1,3-Dichloropropene	ug/l		0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
Trichloroethene	ug/l	1	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Trichlorofluoromethane	ug/l	2000	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	ug/l	1	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Xylenes, Total	ug/l	1000	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Tentatively Identified Compounds (TICs)														
Indane										6.3 NJ				

See Table 12 for validation qualifiers.

Result exceeds NJGWQS (NJAC 7:9C August 2018)

[1] Interim Generic Groundwater Quality Criteria

TABLE 6D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-18 DUP	OB-22	OB-23	OB-24	OB-28	OB-33	RW-16
1,1'-Biphenyl	ug/l	400	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2,4,5-Tetrachlorobenzene	ug/l		1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dioxane	ug/l	0.4	0.016 U	0.33	0.016 U	11	0.016 U	0.016 U	0.016 U	0.017 U	0.016 U	0.017 U	0.016 U	0.016 U
2,2'-oxybis[1-chloropropane]	ug/l	300	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
2,3,4,6-Tetrachlorophenol	ug/l	200	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
2,4,5-Trichlorophenol	ug/l	700	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
2,4,6-Trichlorophenol	ug/l	20	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2,4-Dichlorophenol	ug/l	20	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
2,4-Dimethylphenol	ug/l	100	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
2,4-Dinitrophenol	ug/l	40	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/l		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/l		0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
2-Chloronaphthalene	ug/l	600	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Chlorophenol	ug/l	40	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
2-Methylnaphthalene	ug/l	30	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2-Methylphenol	ug/l		0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ
2-Nitroaniline	ug/l		0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
2-Nitrophenol	ug/l		0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
3,3'-Dichlorobenzidine	ug/l	30	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
3-Nitroaniline	ug/l		0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
4,6-Dinitro-2-methylphenol	ug/l	1	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U
4-Bromophenyl phenyl ether	ug/l		0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
4-Chloro-3-methylphenol	ug/l	100	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
4-Chloroaniline	ug/l		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Chlorophenyl phenyl ether	ug/l		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methylphenol	ug/l		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
4-Nitroaniline	ug/l		0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
4-Nitrophenol	ug/l		0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Acenaphthene	ug/l	400	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Acenaphthylene	ug/l	100	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
Acetophenone	ug/l	700	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
Anthracene	ug/l	2000	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Atrazine	ug/l	3	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Benzaldehyde	ug/l		0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Benzo[a]anthracene	ug/l	0.1	0.016 U	0.016 U	0.016 U	0.016 U	0.082	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
Benzo[a]pyrene	ug/l	0.1	0.022 U	0.022 U	0.022 U	0.022 U	0.026 J	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U
Benzo[b]fluoranthene	ug/l	0.2	0.024 U	0.024 U	0.024 U	0.024 U	0.17	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
Benzo[g,h,i]perylene	ug/l	100	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Benzo[k]fluoranthene	ug/l	0.5	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
Bis(2-chloroethoxy)methane	ug/l		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Bis(2-chloroethyl)ether	ug/l	7	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U
Bis(2-ethylhexyl) phthalate	ug/l	3	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Butyl benzyl phthalate	ug/l	100	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U
Caprolactam	ug/l	5000	0.68 U	0.68 UJ	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 UJ	0.68 UJ	0.68 U	0.68 UJ	0.68 U
Carbazole	ug/l		0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U

TABLE 6D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-18 DUP	OB-22	OB-23	OB-24	OB-28	OB-33	RW-16
Chrysene	ug/l	5	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Dibenz(a,h)anthracene	ug/l	0.3	0.011 U	0.011 U	0.011 U	0.011 U	0.25 *	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
Dibenzofuran	ug/l		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Diethyl phthalate	ug/l	6000	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
Dimethyl phthalate	ug/l	100	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U
Di-n-butyl phthalate	ug/l	700	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Di-n-octyl phthalate	ug/l	100	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Fluoranthene	ug/l	300	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Fluorene	ug/l	300	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Hexachlorobenzene	ug/l	0.02	0.013 U	0.013 U	0.013 U	0.013 U	0.03	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
Hexachlorobutadiene	ug/l	1	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Hexachlorocyclopentadiene	ug/l	40	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Hexachloroethane	ug/l	7	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Indeno[1,2,3-cd]pyrene	ug/l	0.2	0.036 U	0.036 U	0.036 U	0.036 U	0.18	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U
Isophorone	ug/l	40	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Naphthalene	ug/l	300	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Nitrobenzene	ug/l	6	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
N-Nitrosodimethylamine	ug/l	0.8	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
N-Nitrosodi-n-propylamine	ug/l	10	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
N-Nitrosodiphenylamine	ug/l	10	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	1 J	0.89 U	0.89 U	0.89 U	0.89 U
Pentachlorophenol	ug/l	0.3	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Phenanthrene	ug/l	100	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Phenol	ug/l	2000	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Pyrene	ug/l	200	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Tentatively Identified Compounds (TICs)														
Cyclohexanamine, N-cyclohexyl-	ug/l		12 NJ							23 NJ				
Unknown	ug/l					9.8 NJ		6.6 NJ		32 NJ				

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 6E
SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) IN GROUNDWATER
O'CONNOR DISPOSAL AREA (OCDA)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-14A	OB-14B	OB-16	OB-17	OB-18	OB-18 DUP	OB-22	OB-23	OB-24	OB-28	OB-33	RW-16
PCB-1016	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1221	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1232	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1242	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1248	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1254	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1260	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1262	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1268	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 7A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-3	OB-5	OB-12	OB-12 DUP	OB-13	RW-2 (452-462)	RW-2 (279-289)	RW-8 (163-173)	RW-8 (204-214)
1,3-Dichlorobenzene	ug/l	600							0.51 J		
1,4-Dichlorobenzene	ug/l	75							0.98 J		
2-Butanone (MEK)	ug/l	300									5.1
Acetone	ug/l	6000				11		13	5.5		5.3
Benzene	ug/l	1								1.4	2.8
Carbon disulfide	ug/l	700		0.22 J			0.47 UB	4.2			1.1
Chlorobenzene	ug/l	50							8.6		
Isopropylbenzene	ug/l	700							0.35 J		
Methyl tert-butyl ether	ug/l	70						0.48 J			
Methylene Chloride	ug/l	3	0.32 UB		0.37 UB			0.34 J			0.35 J
Toluene	ug/l	600						0.82 J	0.44 J	0.81 J	0.39 J
Tentatively Identified Compounds (TICs)											
1-Propene, 2-methyl-	ug/l							13 NJ			
Unknown	ug/l										33 NJ

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 7A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	RW-9 (206-216)	RW-9A (85-95)	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-02
1,3-Dichlorobenzene	ug/l	600							
1,4-Dichlorobenzene	ug/l	75							
2-Butanone (MEK)	ug/l	300			4.7 J				
Acetone	ug/l	6000	5.6		56	22			6.1
Benzene	ug/l	1							
Carbon disulfide	ug/l	700	5.8	1	0.38 J		0.41 J		0.29 J
Chlorobenzene	ug/l	50							
Isopropylbenzene	ug/l	700							
Methyl tert-butyl ether	ug/l	70							
Methylene Chloride	ug/l	3	0.41 J					0.48 J	
Toluene	ug/l	600	1.1						
Tentatively Identified Compounds (TICs)									
1-Propene, 2-methyl-	ug/l		12 NJ						
Unknown	ug/l		40 NJ						

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 201

TABLE 7B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) AND PCBs IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-2	OB-5	OB-7	OB-12	OB-12 DUP	RW-2 (452-462)	RW-2 (279-289)	RW-8 (204-214)
1,4-Dioxane	ug/l	0.4	0.25 B	0.32 B		0.28 B	0.25 B	0.82	8.1	0.44
Benzo[a]anthracene	ug/l	0.1								
Benzo[a]pyrene	ug/l	0.1								
Benzo[b]fluoranthene	ug/l	0.2								
Bis(2-chloroethyl)ether	ug/l	7			0.055				0.027 J	
Hexachlorobenzene	ug/l	0.02			0.016 J					
Indeno[1,2,3-cd]pyrene	ug/l	0.2								
Phenol	ug/l	2000						8.2 J	2.6 J	0.65 J
Tentatively Identified Compounds (TICs)										
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6	ug/l									6.8 NJ
Benzenesulfonamide, N-butyl-	ug/l									42 NJ
Cyclononasiloxane, octadecamethyl-	ug/l			6.5 NJ						
Diethyltoluamide	ug/l									
Hexadecanoic acid, butyl ester	ug/l									
Unknown	ug/l							13 NJ	7.3 NJ	43 NJ
PCBs										
None										

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.26 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 7B
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) AND PCBs IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	RW-9 (206-216)	RW-10 (120-130)	RW-10 (185-195)	RW-10A (75-85)	SC-02			
1,4-Dioxane	ug/l	0.4					0.29 B			
Benzo[a]anthracene	ug/l	0.1				0.11				
Benzo[a]pyrene	ug/l	0.1				0.063				
Benzo[b]fluoranthene	ug/l	0.2				0.17				
Bis(2-chloroethyl)ether	ug/l	7								
Hexachlorobenzene	ug/l	0.02								
Indeno[1,2,3-cd]pyrene	ug/l	0.2				0.07				
Phenol	ug/l	2000		7.7 J	2 J					
Tentatively Identified Compounds (TICs)										
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6	ug/l		6.9 NJ							
Benzenesulfonamide, N-butyl-	ug/l		15 NJ							
Cyclononasiloxane, octadecamethyl-	ug/l									
Diethyltoluamide	ug/l					39 NJ				
Hexadecanoic acid, butyl ester	ug/l						11 NJ			
Unknown	ug/l									
PCBs										
None										

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.26 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 7C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	OB-2	OB-3	OB-4	OB-5	OB-6	OB-7	OB-12	OB-12 DUP	OB-13	RW-2 (452-462)
Aluminum	mg/L	0.2	0.0806	0.015 U	0.0152 J	0.015 U	0.038 J	0.015 U	0.0325 J	0.0177 J	0.0431	0.0461
Aluminum Dissolved	mg/L	0.2	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.0417
Antimony	mg/L	0.006	0.00063 J	0.001 UB	0.001 UB	0.00062 U	0.0011 UB	0.00098 UB	0.00067 J	0.00062 U	0.00062 U	0.00062 U
Antimony Dissolved	mg/L	0.006	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
Arsenic	mg/L	0.003	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.0044
Arsenic Dissolved	mg/L	0.003	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.0051
Barium	mg/L	6	0.0051 B	0.003 J	0.0567	0.0261	0.0137	0.0172	0.0023 UB	0.0023 UB	0.0048	0.0541
Barium Dissolved	mg/L	6	0.0044 B	0.0028 J	0.0505	0.0193	0.0125	0.0149	0.0016 UB	0.0015 UB	0.0042	0.0539
Beryllium	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Beryllium Dissolved	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Cadmium	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Cadmium Dissolved	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Calcium	mg/L		11.6	9.52	48.1	64.9	16.7	70.6	6.32	6.59	7.41	108
Calcium Dissolved	mg/L		10.5	8.65	46.1	61.3	16	64.8	5.47	5.74	7.49	107
Chromium	mg/L	0.07	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Chromium Dissolved	mg/L	0.07	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Cobalt	mg/L	0.1	0.0013 U	0.0013 U	0.0013 U	0.0068	0.0043	0.0028 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Cobalt Dissolved	mg/L	0.1	0.0013 U	0.0013 U	0.0013 U	0.0044	0.0033 J	0.0021 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Copper	mg/L	1.3	0.0074	0.0019 U	0.0019 U	0.0038 J	0.0113	0.0036 J	0.0044	0.0094	0.0019 U	0.0019 U
Copper Dissolved	mg/L	1.3	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0024 J	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U
Cyanide, Total	mg/L	0.1	0.002 U	0.002 U	0.002 U	0.002 U F	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Iron	mg/L	0.3	0.231	1.93	8.16	12.2	6.31	1.81	0.0457 U	0.0457 U	0.0457 U	0.0457 U
Iron Dissolved	mg/L	0.3	0.0457 U	0.0457 U	1.04	0.893	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U
Lead	mg/L	0.005	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U
Lead Dissolved	mg/L	0.005	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U
Magnesium	mg/L		4.55	3.23	16	32.4	4.37	29.2	2.67	2.68	2.89	0.0657 U
Magnesium Dissolved	mg/L		3.5	2.48	13.3	27.3	3.63	24	1.99	2.06	2.58	0.0657 U
Manganese	mg/L	0.05	0.0083	0.0093	1.42	2.01	0.388	2.6	0.0027 U	0.0027 U	0.0027 U	0.0027 U
Manganese Dissolved	mg/L	0.05	0.0027 U	0.0152	1.25	1.81	0.326	2.16	0.0027 U	0.0027 U	0.0027 U	0.0027 U
Mercury	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Mercury Dissolved	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U

TABLE 7C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	OB-2	OB-3	OB-4	OB-5	OB-6	OB-7	OB-12	OB-12 DUP	OB-13	RW-2 (452-462)
Nickel	mg/L	0.1	0.0013 U	0.0013 U	0.0013 U	0.0024 J	0.0014 J	0.0021 J	0.0013 U	0.0013 U	0.0013 U	0.0057
Nickel Dissolved	mg/L	0.1	0.0013 U	0.0013 U	0.0013 U	0.0016 J	0.0013 U	0.0015 J	0.0013 U	0.0013 U	0.0013 U	0.0048
Potassium	mg/L		1.32	1.02	2.54	3.4	1.74	2.9	0.549	0.583	1.3	58.5
Potassium Dissolved	mg/L		1.18	0.902	2.48	3.17	1.67	2.62	0.472	0.499	1.28	57.3
Selenium	mg/L	0.04	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.0023 J
Selenium Dissolved	mg/L	0.04	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.0035 J
Silver	mg/L	0.04	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Silver Dissolved	mg/L	0.04	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Sodium	mg/L	50	3.84	4.78	101	35.1	10.6	10.7	2.71	2.78	3.59	306
Sodium Dissolved	mg/L	50	2.74	3.54 B	88.2	28.9	9.41 B	8.85 B	1.88	1.95	2.95	287
Thallium	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Thallium Dissolved	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Vanadium	mg/L		0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0103
Vanadium Dissolved	mg/L		0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0122
Zinc	mg/L	2	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
Zinc Dissolved	mg/L	2	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0269 U	0.0054 U
Wet Chemistry												
Alkalinity	mg/l		37.8	28.8	140	271	61.3	284	21.9	21.6	25.7	80.9
Bicarbonate Alkalinity as CaCO3	mg/l		37.8	28.8	140	271	61.3	284	21.9	21.6	25.7	5 U
Chloride	mg/l	250	1.72	4.4	170 D	80.1 D	5.81 D	21.3 D	1.19	1.11	2.79	517 D
Sulfate	mg/l	250	11.3	8.79	8.48	15.2	10.1	9.75	10.7	10.7	8.47	166 D

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 7C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	RW-2 (279-289)	RW-8 (163-173)	RW-8 (204-214)	RW-9 (206-216)	RW-9A (85-95)	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-02
Aluminum	mg/L	0.2	0.0507	0.015 U	0.0206 J	0.224	0.0376 J	0.107	0.0859	0.0165 J	0.0673	0.219
Aluminum Dissolved	mg/L	0.2	0.015 U	0.015 U	0.015 U	0.178	0.015 U	0.0794	0.0793	0.015 U	0.015 U	0.015 U
Antimony	mg/L	0.006	0.00062 U	0.00096 J	0.0011 J	0.0014 J	0.0014 J	0.00086 J	0.00062 U	0.00062 U	0.00062 U	0.0022
Antimony Dissolved	mg/L	0.006	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
Arsenic	mg/L	0.003	0.0071	0.0018 J	0.0018 J	0.0025	0.0026	0.0081	0.0039	0.00077 U	0.00077 U	0.00077 U
Arsenic Dissolved	mg/L	0.003	0.0012 J	0.0011 J	0.0017 J	0.0022	0.0026	0.0075	0.0053	0.00077 U	0.00077 U	0.00077 U
Barium	mg/L	6	0.217	0.0092	0.0157	0.0523	0.01	0.0136	0.0094	0.0091	0.0063	0.061
Barium Dissolved	mg/L	6	0.109	0.0085	0.0164	0.0626	0.0092	0.0131	0.0097	0.0082	0.0061	0.0471
Beryllium	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Beryllium Dissolved	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Cadmium	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Cadmium Dissolved	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Calcium	mg/L		133	31.9	36.3	71.1	23.9	45.6	48.2	57.3	48.5	75.4
Calcium Dissolved	mg/L		128	33	36.9	65.3	23	45.1	48.2	54.2	48.4	64.3
Chromium	mg/L	0.07	0.0022 J	0.0013 U	0.0035 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Chromium Dissolved	mg/L	0.07	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Cobalt	mg/L	0.1	0.0138	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0158	0.0013 U	0.0028 J
Cobalt Dissolved	mg/L	0.1	0.0119	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0155	0.0013 U	0.0013 U
Copper	mg/L	1.3	0.0025 J	0.0019 U	0.0043	0.0078	0.0019 U	0.0042	0.0019 U	0.0025 J	0.0026 J	0.0239
Copper Dissolved	mg/L	1.3	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.011
Cyanide, Total	mg/L	0.1	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 J	0.002 U	0.002 U
Iron	mg/L	0.3	27.5	0.0771 J	0.353	0.278	0.258	0.109 J	0.0457 U	0.339	0.105 J	0.852
Iron Dissolved	mg/L	0.3	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U	0.0457 U
Lead	mg/L	0.005	0.00037 U	0.00037 U	0.0021	0.00037 U	0.00037 U	0.0012	0.00037 U	0.0004 J	0.0011 J	0.004 B
Lead Dissolved	mg/L	0.005	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U
Magnesium	mg/L		50.1	6.61	15.4	16.6	5.8	0.0657 U	1.31	15.7	15.3	18.7
Magnesium Dissolved	mg/L		49.3	6.94	17.2	17	5.53	0.0657 U	0.973	13.7	13.8	14.1
Manganese	mg/L	0.05	5.73	0.0142	0.109	0.177	0.0346	0.0027 U	0.0027 U	4.37	0.0143	0.0502
Manganese Dissolved	mg/L	0.05	5.4	0.0164	0.088	0.0866	0.0305	0.0027 U	0.0027 U	4.58	0.0027 U	0.0027 U
Mercury	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Mercury Dissolved	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U

TABLE 7C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	RW-2 (279-289)	RW-8 (163-173)	RW-8 (204-214)	RW-9 (206-216)	RW-9A (85-95)	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-02
Nickel	mg/L	0.1	0.0124	0.0077	0.0069	0.0013 U	0.0063	0.0091	0.0015 J	0.0119	0.0013 J	0.0055
Nickel Dissolved	mg/L	0.1	0.0106	0.0044	0.0084	0.0013 U	0.0139	0.0083	0.0015 J	0.0127	0.0013 U	0.0042
Potassium	mg/L		7.83	1.99	51.3	14.3	2.02	19.9	7.94	2.65	2.04	5.21
Potassium Dissolved	mg/L		7.61	1.98	46.8	18.1	1.93	20	8.75	2.45	2.01	4.36
Selenium	mg/L	0.04	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.0021 J	0.00069 U	0.00069 U	0.00069 U	0.00083 J
Selenium Dissolved	mg/L	0.04	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.0032 J	0.00081 J	0.00069 U	0.00069 U	0.00069 U
Silver	mg/L	0.04	0.0045	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Silver Dissolved	mg/L	0.04	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Sodium	mg/L	50	112	46.1	89.8	145	4.94	69.5	25.3	13.5	5.57	8.46
Sodium Dissolved	mg/L	50	105	44.4	92	152	4.68	63.8	27	12.4	5.04	6.36
Thallium	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Thallium Dissolved	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Vanadium	mg/L		0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0051	0.0017 J	0.0012 U	0.0012 U	0.0012 U
Vanadium Dissolved	mg/L		0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0056	0.0017 J	0.0012 U	0.0012 U	0.0012 U
Zinc	mg/L	2	0.0154 J	0.0054 U	0.0461	0.0089 J	0.0094 J	0.0057 J	0.0054 U	0.0054 U	0.0054 U	0.11
Zinc Dissolved	mg/L	2	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.078
Wet Chemistry												
Alkalinity	mg/l		621	76.6	216	125	77.4	114	70	185	148	255
Bicarbonate Alkalinity as CaCO3	mg/l		621	76.6	205	101	77.4	5 U	5 U	185	148	255
Chloride	mg/l	250	4.91 D	5.9 J	47.1 D	7.46 D	1.7	8.76 D	4.8	3.81	3.23	2.83
Sulfate	mg/l	250	0.33 U	110 D	102 D	377 D	11.9	133 D	104 D	43.6 D	36.9 D F	37.7 D

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 7D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-2	OB-3	OB-4	OB-5	OB-6	OB-7	OB-12	OB-12 DUP	OB-13	RW-2 (452-462)
1,1,1-Trichloroethane	ug/l	30	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-Tetrachloroethane	ug/l	1	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l		0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	ug/l	3	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1-Dichloroethane	ug/l	50	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloroethene	ug/l	1	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2,3-Trichlorobenzene	ug/l		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2,3-Trichloropropane	ug/l	0.03	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
1,2,4-Trichlorobenzene	ug/l	9	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-Dibromo-3-Chloropropane	ug/l	0.02	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichlorobenzene	ug/l	600	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloroethane	ug/l	2	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloropropane	ug/l	1	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	ug/l	600	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,4-Dichlorobenzene	ug/l	75	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
2-Butanone (MEK)	ug/l	300	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Hexanone	ug/l	40	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
4-Methyl-2-pentanone (MIBK)	ug/l		2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Acetone	ug/l	6000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	11	5 U	13
Benzene	ug/l	1	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Bromoform	ug/l	4	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
Bromomethane	ug/l	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l	700	0.16 U	0.16 U	0.16 U	0.22 J	0.16 U	0.16 U	0.16 U	0.16 U	0.47 UB	4.2
Carbon tetrachloride	ug/l	1	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Chlorobenzene	ug/l	50	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Chlorobromomethane	ug/l		0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Chlorodibromomethane	ug/l	1	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chloroethane[1]	ug/l	5	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Chloroform	ug/l	70	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	ug/l		0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/l	70	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
cis-1,3-Dichloropropene	ug/l		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	ug/l		0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Dichlorobromomethane	ug/l	1	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Dichlorodifluoromethane	ug/l	1000	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Ethylbenzene	ug/l	700	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U

TABLE 7D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-2	OB-3	OB-4	OB-5	OB-6	OB-7	OB-12	OB-12 DUP	OB-13	RW-2 (452-462)
Ethylene Dibromide	ug/l	0.03	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	ug/l	700	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Methyl acetate	ug/l	7000	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U F	0.31 U	0.31 U	0.31 U	0.31 U
Methyl tert-butyl ether	ug/l	70	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.48 J
Methylcyclohexane	ug/l		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Methylene Chloride	ug/l	3	0.32 U	0.32 UB	0.32 U	0.32 U	0.32 U	0.32 U	0.37 UB	0.32 U	0.32 U	0.34 J
Styrene	ug/l	100	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Tetrachloroethene	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	ug/l	600	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.82 J
trans-1,2-Dichloroethene	ug/l	100	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
trans-1,3-Dichloropropene	ug/l		0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
Trichloroethene	ug/l	1	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Trichlorofluoromethane	ug/l	2000	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	ug/l	1	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Xylenes, Total	ug/l	1000	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Tentatively Identified Compounds (TICs)												
1-Propene, 2-methyl-	ug/l											
Unknown	ug/l											

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)
[1] Interim Generic Groundwater Quality Criteria

TABLE 7D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	RW-2 (279-289)	RW-8 (163-173)	RW-8 (204-214)	RW-9 (206-216)	RW-9A (85-95)	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-02
1,1,1-Trichloroethane	ug/l	30	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-Tetrachloroethane	ug/l	1	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l		0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	ug/l	3	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1-Dichloroethane	ug/l	50	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloroethene	ug/l	1	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2,3-Trichlorobenzene	ug/l		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2,3-Trichloropropane	ug/l	0.03	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
1,2,4-Trichlorobenzene	ug/l	9	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-Dibromo-3-Chloropropane	ug/l	0.02	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichlorobenzene	ug/l	600	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloroethane	ug/l	2	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloropropane	ug/l	1	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	ug/l	600	0.51 J	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,4-Dichlorobenzene	ug/l	75	0.98 J	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
2-Butanone (MEK)	ug/l	300	1.9 U	1.9 U	5.1	1.9 U	1.9 U	4.7 J	1.9 U	1.9 U	1.9 U	1.9 U
2-Hexanone	ug/l	40	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
4-Methyl-2-pentanone (MIBK)	ug/l		2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Acetone	ug/l	6000	5.5	5 U	5.3	5.6	5 U	56	22	5 U	5 U	6.1
Benzene	ug/l	1	0.43 U	1.4	2.8	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Bromoform	ug/l	4	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
Bromomethane	ug/l	10	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l	700	0.16 U	0.16 U	1.1	5.8	1	0.38 J	0.16 U	0.41 J	0.16 U	0.29 J
Carbon tetrachloride	ug/l	1	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Chlorobenzene	ug/l	50	8.6	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Chlorobromomethane	ug/l		0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Chlorodibromomethane	ug/l	1	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chloroethane[1]	ug/l	5	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Chloroform	ug/l	70	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	ug/l		0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/l	70	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
cis-1,3-Dichloropropene	ug/l		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	ug/l		0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Dichlorobromomethane	ug/l	1	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Dichlorodifluoromethane	ug/l	1000	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Ethylbenzene	ug/l	700	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U

TABLE 7D
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	RW-2 (279-289)	RW-8 (163-173)	RW-8 (204-214)	RW-9 (206-216)	RW-9A (85-95)	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-02
Ethylene Dibromide	ug/l	0.03	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	ug/l	700	0.35 J	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Methyl acetate	ug/l	7000	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Methyl tert-butyl ether	ug/l	70	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
Methylcyclohexane	ug/l		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Methylene Chloride	ug/l	3	0.32 U	0.32 U	0.35 J	0.41 J	0.32 U	0.32 U	0.32 U	0.32 U	0.48 J	0.32 U
Styrene	ug/l	100	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Tetrachloroethene	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	ug/l	600	0.44 J	0.81 J	0.39 J	1.1	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
trans-1,2-Dichloroethene	ug/l	100	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
trans-1,3-Dichloropropene	ug/l		0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
Trichloroethene	ug/l	1	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Trichlorofluoromethane	ug/l	2000	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	ug/l	1	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Xylenes, Total	ug/l	1000	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Tentatively Identified Compounds (TICs)												
1-Propene, 2-methyl-	ug/l		13 NJ			12 NJ						
Unknown	ug/l				33 NJ	40 NJ						

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)
[1] Interim Generic Groundwater Quality Criteria

TABLE 7E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-2	OB-3	OB-4	OB-5	OB-6	OB-7	OB-12	OB-12 DUP	OB-13	RW-2 (452-462)	RW-2 (279-289)
1,1'-Biphenyl	ug/l	400	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2,4,5-Tetrachlorobenzene	ug/l		1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dioxane	ug/l	0.4	0.25 B	0.017 U	0.016 U	0.32 B	0.017 U	0.016 U	0.28 B	0.25 B	0.016 U	0.82	8.1
2,2'-oxybis[1-chloropropane]	ug/l	300	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
2,3,4,6-Tetrachlorophenol	ug/l	200	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
2,4,5-Trichlorophenol	ug/l	700	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
2,4,6-Trichlorophenol	ug/l	20	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2,4-Dichlorophenol	ug/l	20	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
2,4-Dimethylphenol	ug/l	100	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
2,4-Dinitrophenol	ug/l	40	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/l		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/l		0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
2-Chloronaphthalene	ug/l	600	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Chlorophenol	ug/l	40	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
2-Methylnaphthalene	ug/l	30	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2-Methylphenol	ug/l		0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ
2-Nitroaniline	ug/l		0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
2-Nitrophenol	ug/l		0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
3,3'-Dichlorobenzidine	ug/l	30	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
3-Nitroaniline	ug/l		0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
4,6-Dinitro-2-methylphenol	ug/l	1	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U
4-Bromophenyl phenyl ether	ug/l		0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
4-Chloro-3-methylphenol	ug/l	100	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
4-Chloroaniline	ug/l		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Chlorophenyl phenyl ether	ug/l		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methylphenol	ug/l		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
4-Nitroaniline	ug/l		0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
4-Nitrophenol	ug/l		0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Acenaphthene	ug/l	400	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Acenaphthylene	ug/l	100	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
Acetophenone	ug/l	700	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
Anthracene	ug/l	2000	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Atrazine	ug/l	3	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Benzaldehyde	ug/l		0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Benzo[a]anthracene	ug/l	0.1	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
Benzo[a]pyrene	ug/l	0.1	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U
Benzo[b]fluoranthene	ug/l	0.2	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
Benzo[g,h,i]perylene	ug/l	100	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Benzo[k]fluoranthene	ug/l	0.5	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
Bis(2-chloroethoxy)methane	ug/l		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Bis(2-chloroethyl)ether	ug/l	7	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.055	0.026 U	0.026 U	0.026 U	0.026 U	0.027 J

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.026 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 7E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-2	OB-3	OB-4	OB-5	OB-6	OB-7	OB-12	OB-12 DUP	OB-13	RW-2 (452-462)	RW-2 (279-289)
Bis(2-ethylhexyl) phthalate	ug/l	3	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Butyl benzyl phthalate	ug/l	100	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U
Caprolactam	ug/l	5000	0.68 UJ	0.68 UJ	0.68 U	0.68 UJ	0.68 U	0.68 U F	0.68 UJ	0.68 UJ	0.68 UJ	0.68 UJ	0.68 UJ
Carbazole	ug/l		0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Chrysene	ug/l	5	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Dibenz(a,h)anthracene	ug/l	0.3	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
Dibenzofuran	ug/l		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Diethyl phthalate	ug/l	6000	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
Dimethyl phthalate	ug/l	100	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U
Di-n-butyl phthalate	ug/l	700	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Di-n-octyl phthalate	ug/l	100	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Fluoranthene	ug/l	300	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Fluorene	ug/l	300	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Hexachlorobenzene	ug/l	0.02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.016 J	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
Hexachlorobutadiene	ug/l	1	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 UJ	0.78 UJ
Hexachlorocyclopentadiene	ug/l	40	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Hexachloroethane	ug/l	7	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Indeno[1,2,3-cd]pyrene	ug/l	0.2	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U
Isophorone	ug/l	40	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Naphthalene	ug/l	300	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Nitrobenzene	ug/l	6	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
N-Nitrosodimethylamine	ug/l	0.8	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
N-Nitrosodi-n-propylamine	ug/l	10	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
N-Nitrosodiphenylamine	ug/l	10	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U
Pentachlorophenol	ug/l	0.3	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Phenanthrene	ug/l	100	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Phenol	ug/l	2000	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	8.2 J	2.6 J
Pyrene	ug/l	200	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Tentatively Identified Compounds (TICs)													
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca	ug/l												
Benzenesulfonamide, N-butyl-	ug/l												
Cyclononasiloxane, octadecamethyl	ug/l					6.5 NJ							
Diethyltoluamide	ug/l												
Hexadecanoic acid, butyl ester	ug/l												
Unknown	ug/l											13 NJ	7.3 NJ

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.026 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 7E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	RW-8 (163-173)	RW-8 (204-214)	RW-9 (206-216)	RW-9A (85-95)	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-02
1,1'-Biphenyl	ug/l	400	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2,4,5-Tetrachlorobenzene	ug/l		1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dioxane	ug/l	0.4	0.016 U	0.44	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.29 B
2,2'-oxybis[1-chloropropane]	ug/l	300	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
2,3,4,6-Tetrachlorophenol	ug/l	200	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
2,4,5-Trichlorophenol	ug/l	700	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
2,4,6-Trichlorophenol	ug/l	20	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2,4-Dichlorophenol	ug/l	20	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
2,4-Dimethylphenol	ug/l	100	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
2,4-Dinitrophenol	ug/l	40	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/l		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/l		0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
2-Chloronaphthalene	ug/l	600	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Chlorophenol	ug/l	40	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
2-Methylnaphthalene	ug/l	30	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2-Methylphenol	ug/l		0.26 U	0.26 U	0.26 U	0.26 U	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 U
2-Nitroaniline	ug/l		0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
2-Nitrophenol	ug/l		0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
3,3'-Dichlorobenzidine	ug/l	30	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
3-Nitroaniline	ug/l		0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U
4,6-Dinitro-2-methylphenol	ug/l	1	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U
4-Bromophenyl phenyl ether	ug/l		0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
4-Chloro-3-methylphenol	ug/l	100	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
4-Chloroaniline	ug/l		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Chlorophenyl phenyl ether	ug/l		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methylphenol	ug/l		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
4-Nitroaniline	ug/l		0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
4-Nitrophenol	ug/l		0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Acenaphthene	ug/l	400	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Acenaphthylene	ug/l	100	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
Acetophenone	ug/l	700	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
Anthracene	ug/l	2000	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Atrazine	ug/l	3	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Benzaldehyde	ug/l		0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Benzo[a]anthracene	ug/l	0.1	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.11	0.016 U
Benzo[a]pyrene	ug/l	0.1	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.063	0.022 U
Benzo[b]fluoranthene	ug/l	0.2	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.17	0.024 U
Benzo[g,h,i]perylene	ug/l	100	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Benzo[k]fluoranthene	ug/l	0.5	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
Bis(2-chloroethoxy)methane	ug/l		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Bis(2-chloroethyl)ether	ug/l	7	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.026 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 7E
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	RW-8 (163-173)	RW-8 (204-214)	RW-9 (206-216)	RW-9A (85-95)	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-02
Bis(2-ethylhexyl) phthalate	ug/l	3	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Butyl benzyl phthalate	ug/l	100	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U
Caprolactam	ug/l	5000	0.68 U	0.68 U	0.68 U	0.68 U	0.68 UJ	0.68 UJ	0.68 UJ	0.68 UJ	0.68 U
Carbazole	ug/l		0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Chrysene	ug/l	5	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Dibenz(a,h)anthracene	ug/l	0.3	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
Dibenzofuran	ug/l		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Diethyl phthalate	ug/l	6000	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
Dimethyl phthalate	ug/l	100	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U
Di-n-butyl phthalate	ug/l	700	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Di-n-octyl phthalate	ug/l	100	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Fluoranthene	ug/l	300	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U
Fluorene	ug/l	300	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Hexachlorobenzene	ug/l	0.02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
Hexachlorobutadiene	ug/l	1	0.78 U	0.78 U	0.78 U	0.78 U	0.78 UJ	0.78 UJ	0.78 UJ	0.78 UJ	0.78 UJ
Hexachlorocyclopentadiene	ug/l	40	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Hexachloroethane	ug/l	7	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Indeno[1,2,3-cd]pyrene	ug/l	0.2	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.07	0.036 U
Isophorone	ug/l	40	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Naphthalene	ug/l	300	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Nitrobenzene	ug/l	6	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
N-Nitrosodimethylamine	ug/l	0.8	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
N-Nitrosodi-n-propylamine	ug/l	10	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
N-Nitrosodiphenylamine	ug/l	10	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U
Pentachlorophenol	ug/l	0.3	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Phenanthrene	ug/l	100	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Phenol	ug/l	2000	0.29 U	0.65 J	0.29 U	0.29 U	7.7 J	2 J	0.29 U	0.29 U	0.29 U
Pyrene	ug/l	200	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Tentatively Identified Compounds (TICs)											
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca	ug/l			6.8 NJ	6.9 NJ						
Benzenesulfonamide, N-butyl-	ug/l			42 NJ	15 NJ						
Cyclononasiloxane, octadecamethyl	ug/l										
Diethyltoluamide	ug/l								39 NJ		
Hexadecanoic acid, butyl ester	ug/l										11 NJ
Unknown	ug/l			43 NJ							

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.026 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 7F
SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) IN GROUNDWATER
CANNON MINE PIT (CMP)
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	OB-2	OB-3	OB-4	OB-5	OB-6	OB-7	OB-12	OB-12 DUP	OB-13	RW-2 (452-462)
PCB-1016	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1221	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1232	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1242	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1248	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1254	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1260	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1262	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1268	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U

Parameter	Result Unit	NJGWQS ug/l	RW-2 (279-289)	RW-8 (163-173)	RW-8 (204-214)	RW-9 (206-216)	RW-9A (85-95)	RW-10 (120-130)	RW-10 (185-195)	RW-10A (51-61)	RW-10A (75-85)	SC-02
PCB-1016	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1221	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1232	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1242	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1248	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1254	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1260	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1262	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1268	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 8A
SUMMARY OF DETECTED ORGANIC COMPOUNDS IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

VOC Parameter	Result Unit	NJGWQS ug/l	OB-10	OB-29	RW-12 (130-140)	RW-12 (55-65)
1,2,3-Trichloropropane	ug/l	0.03			0.0033 J	
Acetone	ug/l	6000				14
Carbon disulfide	ug/l	700	0.4 UB	0.28 UB	2.8	1.9
Toluene	ug/l	600				1.7
VOC Tentatively Identified Compounds (TICs)						
1-Hexanol, 2-ethyl-	ug/l	200				10 NJ

SVOC Parameter	Result Unit	NJGWQS ug/l	OB-10	OB-29	RW-12 (130-140)	RW-12 (55-65)
Benzo[a]anthracene	ug/l	0.1		0.036 J		
Benzo[a]pyrene	ug/l	0.1		0.046 J		
Benzo[b]fluoranthene	ug/l	0.2		0.071		
Indeno[1,2,3-cd]pyrene	ug/l	0.2		0.076		
Isophorone	ug/l	40				1.2 J
Phenol	ug/l	2000			0.75 J	7.5 J
SVOC Tentatively Identified Compounds (TICs)						
Benzenesulfonamide, N-butyl-	ug/l					14 NJ
Ethanol, 2-(2-butoxyethoxy)-	ug/l					42 NJ
Unknown	ug/l			11 NJ	7.2 NJ	7.9 NJ
PCBs						
None						

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 8B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	OB-10	OB-29	RW-12 (130-140)	RW-12 (55-65)
Aluminum	mg/L	0.2	0.0192 J	0.624	0.413	0.173
Aluminum Dissolved	mg/L	0.2	0.015 U	0.015 U	0.124	0.152
Antimony	mg/L	0.006	0.00062 U	0.00062 U	0.00062 U	0.00062 U
Antimony Dissolved	mg/L	0.006	0.00062 U	0.00062 U	0.00062 U	0.00062 U
Arsenic	mg/L	0.003	0.00077 U	0.00077 U	0.0056	0.0148
Arsenic Dissolved	mg/L	0.003	0.00077 U	0.00077 U	0.0057	0.016
Barium	mg/L	6	0.0067	0.0104	0.0119	0.0216
Barium Dissolved	mg/L	6	0.0063	0.0062	0.0064	0.0206
Beryllium	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Beryllium Dissolved	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Cadmium	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Cadmium Dissolved	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Calcium	mg/L		13.5	13.3	23.5	52.9
Calcium Dissolved	mg/L		13.6	13.7	21	51.1
Chromium	mg/L	0.07	0.0013 U	0.0014 J	0.0013 U	0.0013 U
Chromium Dissolved	mg/L	0.07	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Cobalt	mg/L	0.1	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Cobalt Dissolved	mg/L	0.1	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Copper	mg/L	1.3	0.0019 U	0.0023 J	0.0035 J	0.0019 U
Copper Dissolved	mg/L	1.3	0.0019 U	0.0019 U	0.0019 U	0.0019 U
Cyanide, Total	mg/L	0.1	0.002 U	0.0027 J	0.002 U	0.002 U
Iron	mg/L	0.3	0.214	0.949	0.475	0.0457 U
Iron Dissolved	mg/L	0.3	0.0457 U	0.0457 U	0.0457 U	0.0457 U
Lead	mg/L	0.005	0.00037 U	0.00042 J	0.00093 J	0.00057 J
Lead Dissolved	mg/L	0.005	0.00037 U	0.00037 U	0.00037 U	0.00037 U
Magnesium	mg/L		4.34	4.49	0.492	0.412
Magnesium Dissolved	mg/L		3.81	3.78	0.0993 J	0.893
Manganese	mg/L	0.05	0.03	0.023	0.0122	0.0027 U
Manganese Dissolved	mg/L	0.05	0.0027 U	0.0027 U	0.0027 U	0.0027 U
Mercury	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Mercury Dissolved	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Nickel	mg/L	0.1	0.0013 U	0.0016 J	0.0316	0.0023 J
Nickel Dissolved	mg/L	0.1	0.0013 U	0.0013 U	0.0078	0.0015 J
Potassium	mg/L		1.26	1.39	10.1	15.3

TABLE 8B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	OB-10	OB-29	RW-12 (130-140)	RW-12 (55-65)
Potassium Dissolved	mg/L		1.26	1.27	9.57	14.1
Selenium	mg/L	0.04	0.00069 U	0.00069 U	0.00069 U	0.0031 J
Selenium Dissolved	mg/L	0.04	0.00069 U	0.00069 U	0.0013 J	0.0047 J
Silver	mg/L	0.04	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Silver Dissolved	mg/L	0.04	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Sodium	mg/L	50	3.97	3.96	29.7	152
Sodium Dissolved	mg/L	50	3.21	3.18	27.4	128
Thallium	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Thallium Dissolved	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Vanadium	mg/L		0.0012 U	0.0014 J	0.0012 U	0.0023 J
Vanadium Dissolved	mg/L		0.0012 U	0.0012 U	0.0012 U	0.0018 J
Zinc	mg/L	2	0.0054 U	0.0054 U	0.0295	0.0054 U
Zinc Dissolved	mg/L	2	0.0054 U	0.0054 U	0.0054 U	0.0054 U
Wet Chemistry						
Alkalinity	mg/l		47.1	46.9	99.9	77.7
Bicarbonate Alkalinity as CaCO3	mg/l		47.1	46.9	5 U	15.5
Chloride	mg/l	250	4.33	4.26	3.56	43.6 D
Sulfate	mg/l	250	5.57	5.55	25.5	266 D

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 8C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	OB-10	OB-29	RW-12 (130-140)	RW-12 (55-65)
1,1,1-Trichloroethane	ug/l	30	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-Tetrachloroethane	ug/l	1	0.37 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l		0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	ug/l	3	0.43 U	0.43 U	0.43 U	0.43 U
1,1-Dichloroethane	ug/l	50	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloroethene	ug/l	1	0.12 U	0.12 U	0.12 U	0.12 U
1,2,3-Trichlorobenzene	ug/l		0.36 U	0.36 U	0.36 U	0.36 U
1,2,3-Trichloropropane	ug/l	0.03	0.003 U	0.003 U	0.0033 J	0.003 U
1,2,4-Trichlorobenzene	ug/l	9	0.37 U	0.37 U	0.37 U	0.37 U
1,2-Dibromo-3-Chloropropane	ug/l	0.02	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichlorobenzene	ug/l	600	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloroethane	ug/l	2	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloropropane	ug/l	1	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	ug/l	600	0.34 U	0.34 U	0.34 U	0.34 U
1,4-Dichlorobenzene	ug/l	75	0.76 U	0.76 U	0.76 U	0.76 U
2-Butanone (MEK)	ug/l	300	1.9 U	1.9 U	1.9 U	1.9 U
2-Hexanone	ug/l	40	2.9 U	2.9 U	2.9 U	2.9 U
4-Methyl-2-pentanone (MIBK)	ug/l		2.7 U	2.7 U	2.7 U	2.7 U
Acetone	ug/l	6000	5 U	5 U	5 U	14
Benzene	ug/l	1	0.43 U	0.43 U	0.43 U	0.43 U
Bromoform	ug/l	4	0.54 U	0.54 U	0.54 U	0.54 U
Bromomethane	ug/l	10	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l	700	0.4 UB	0.28 UB	2.8	1.9
Carbon tetrachloride	ug/l	1	0.21 U	0.21 U	0.21 U	0.21 U
Chlorobenzene	ug/l	50	0.38 U	0.38 U	0.38 U	0.38 U
Chlorobromomethane	ug/l		0.41 U	0.41 U	0.41 U	0.41 U
Chlorodibromomethane	ug/l	1	0.28 U	0.28 U	0.28 U	0.28 U
Chloroethane[1]	ug/l	5	0.32 U	0.32 U	0.32 U	0.32 U
Chloroform	ug/l	70	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	ug/l		0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/l	70	0.22 U	0.22 U	0.22 U	0.22 U
cis-1,3-Dichloropropene	ug/l		0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	ug/l		0.32 U	0.32 U	0.32 U	0.32 U
Dichlorobromomethane	ug/l	1	0.34 U	0.34 U	0.34 U	0.34 U

TABLE 8C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	OB-10	OB-29	RW-12 (130-140)	RW-12 (55-65)
Dichlorodifluoromethane	ug/l	1000	0.12 U	0.12 U	0.12 U	0.12 U
Ethylbenzene	ug/l	700	0.3 U	0.3 U	0.3 U	0.3 U
Ethylene Dibromide	ug/l	0.03	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	ug/l	700	0.34 U	0.34 U	0.34 U	0.34 U
Methyl acetate	ug/l	7000	0.31 U	0.31 U	0.31 U	0.31 U
Methyl tert-butyl ether	ug/l	70	0.47 U	0.47 U	0.47 U	0.47 U
Methylcyclohexane	ug/l		0.26 U	0.26 U	0.26 U	0.26 U
Methylene Chloride	ug/l	3	0.32 U	0.32 U	0.32 U	0.32 U
Styrene	ug/l	100	0.42 U	0.42 U	0.42 U	0.42 U
Tetrachloroethene	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	ug/l	600	0.38 U	0.38 U	0.38 U	1.7
trans-1,2-Dichloroethene	ug/l	100	0.24 U	0.24 U	0.24 U	0.24 U
trans-1,3-Dichloropropene	ug/l		0.49 U	0.49 U	0.49 U	0.49 U
Trichloroethene	ug/l	1	0.31 U	0.31 U	0.31 U	0.31 U
Trichlorofluoromethane	ug/l	2000	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	ug/l	1	0.17 U	0.17 U	0.17 U	0.17 U
Xylenes, Total	ug/l	1000	0.65 U	0.65 U	0.65 U	0.65 U
Tentatively Identified Compounds (TICs)						
1-Hexanol, 2-ethyl-	ug/l	200				10 NJ

See Table 12 for validation qualifiers.

Result exceeds NJGWQS (NJAC 7:9C August 2018)

[1] Interim Generic Groundwater Quality Criteria

TABLE 8D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	OB-10	OB-29	RW-12 (130-140)	RW-12 (55-65)
1,1'-Biphenyl	ug/l	400	1.2 U	1.2 U	1.2 U	1.2 U
1,2,4,5-Tetrachlorobenzene	ug/l		1.3 U	1.3 U	1.2 U	1.2 U
1,4-Dioxane	ug/l	0.4	0.016 U	0.016 U	0.016 U	0.016 U
2,2'-oxybis[1-chloropropane]	ug/l	300	0.66 U	0.66 U	0.63 U	0.63 U
2,3,4,6-Tetrachlorophenol	ug/l	200	0.78 U	0.78 U	0.75 U	0.75 U
2,4,5-Trichlorophenol	ug/l	700	0.29 U	0.29 U	0.28 U	0.28 U
2,4,6-Trichlorophenol	ug/l	20	0.31 U	0.31 U	0.3 U	0.3 U
2,4-Dichlorophenol	ug/l	20	0.44 U	0.44 U	0.42 U	0.42 U
2,4-Dimethylphenol	ug/l	100	0.25 U	0.25 U	0.24 U	0.24 U
2,4-Dinitrophenol	ug/l	40	15 U	15 U	14 U	14 U
2,4-Dinitrotoluene	ug/l		1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/l		0.41 U	0.41 U	0.39 U	0.39 U
2-Chloronaphthalene	ug/l	600	1.2 U	1.2 U	1.2 U	1.2 U
2-Chlorophenol	ug/l	40	0.39 U	0.39 U	0.38 UJ	0.38 U
2-Methylnaphthalene	ug/l	30	1.1 U	1.1 U	1.1 U	1.1 U
2-Methylphenol	ug/l		0.27 UJ	0.27 UJ	0.26 UJ	0.26 UJ
2-Nitroaniline	ug/l		0.49 U	0.49 U	0.47 U	0.47 U
2-Nitrophenol	ug/l		0.78 U	0.78 U	0.75 U	0.75 U
3,3'-Dichlorobenzidine	ug/l	30	1.5 U	1.5 U	1.4 U	1.4 U
3-Nitroaniline	ug/l		1 U	1 U	0.96 U	0.96 U
4,6-Dinitro-2-methylphenol	ug/l	1	14 U	14 U	13 U	13 U
4-Bromophenyl phenyl ether	ug/l		0.78 U	0.78 U	0.75 U	0.75 U
4-Chloro-3-methylphenol	ug/l	100	0.6 U	0.6 U	0.58 U	0.58 U
4-Chloroaniline	ug/l		2 U	2 U	1.9 U	1.9 U
4-Chlorophenyl phenyl ether	ug/l		1.3 U	1.3 U	1.3 U	1.3 U
4-Methylphenol	ug/l		0.24 U	0.24 U	0.24 U	0.24 U
4-Nitroaniline	ug/l		0.57 U	0.57 U	0.54 U	0.54 U
4-Nitrophenol	ug/l		0.72 U	0.72 U	0.69 U	0.69 U
Acenaphthene	ug/l	400	1.1 U	1.1 U	1.1 U	1.1 U
Acenaphthylene	ug/l	100	0.86 U	0.86 U	0.82 U	0.82 U
Acetophenone	ug/l	700	0.82 U	0.82 U	0.79 U	0.79 U
Anthracene	ug/l	2000	0.66 U	0.66 U	0.63 U	0.63 U
Atrazine	ug/l	3	1.4 U	1.4 U	1.3 U	1.3 U
Benzaldehyde	ug/l		0.62 U	0.62 U	0.59 U	0.59 U
Benzo[a]anthracene	ug/l	0.1	0.016 U	0.036 J	0.016 U	0.016 U
Benzo[a]pyrene	ug/l	0.1	0.023 U	0.046 J	0.022 U	0.022 U
Benzo[b]fluoranthene	ug/l	0.2	0.025 U	0.071	0.024 U	0.024 U
Benzo[g,h,i]perylene	ug/l	100	1.5 U	1.5 U	1.4 U	1.4 U
Benzo[k]fluoranthene	ug/l	0.5	0.7 U	0.7 U	0.67 U	0.67 U
Bis(2-chloroethoxy)methane	ug/l		0.25 U	0.25 U	0.24 U	0.24 U
Bis(2-chloroethyl)ether	ug/l	7	0.027 U	0.027 U	0.026 U	0.026 U
Bis(2-ethylhexyl) phthalate	ug/l	3	1.8 U	1.8 U	1.7 U	1.7 U
Butyl benzyl phthalate	ug/l	100	0.89 U	0.89 U	0.85 U	0.85 U
Caprolactam	ug/l	5000	0.71 UJ	0.71 UJ	0.68 U	0.68 UJ
Carbazole	ug/l		0.71 U	0.71 U	0.68 U	0.68 U
Chrysene	ug/l	5	0.94 U	0.94 U	0.91 U	0.91 U
Dibenz(a,h)anthracene	ug/l	0.3	0.012 U	0.012 U	0.011 U	0.011 U
Dibenzofuran	ug/l		1.1 U	1.1 U	1.1 U	1.1 U
Diethyl phthalate	ug/l	6000	1 U	1 U	0.98 U	0.98 U
Dimethyl phthalate	ug/l	100	0.8 U	0.8 U	0.77 U	0.77 U

TABLE 8D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	OB-10	OB-29	RW-12 (130-140)	RW-12 (55-65)
Di-n-butyl phthalate	ug/l	700	0.88 U	0.88 U	0.84 U	0.84 U
Di-n-octyl phthalate	ug/l	100	5 U	5 U	4.8 U	4.8 U
Fluoranthene	ug/l	300	0.88 U	0.88 U	0.84 U	0.84 U
Fluorene	ug/l	300	0.95 U	0.95 U	0.91 U	0.91 U
Hexachlorobenzene	ug/l	0.02	0.014 U	0.014 U	0.013 U	0.013 U
Hexachlorobutadiene	ug/l	1	0.81 U	0.81 U	0.78 U	0.78 UJ
Hexachlorocyclopentadiene	ug/l	40	1.8 U	1.8 U	1.7 U	1.7 U
Hexachloroethane	ug/l	7	1.2 U	1.2 U	1.2 U	1.2 U
Indeno[1,2,3-cd]pyrene	ug/l	0.2	0.038 U	0.076	0.036 U	0.036 U
Isophorone	ug/l	40	0.83 U	0.83 U	0.8 U	1.2 J
Naphthalene	ug/l	300	1.2 U	1.2 U	1.1 U	1.1 U
Nitrobenzene	ug/l	6	0.59 U	0.59 U	0.57 U	0.57 U
N-Nitrosodimethylamine	ug/l	0.8	0.12 U	0.12 U	0.12 U	0.12 U
N-Nitrosodi-n-propylamine	ug/l	10	0.45 U	0.45 U	0.43 U	0.43 U
N-Nitrosodiphenylamine	ug/l	10	0.93 U	0.93 U	0.89 U	0.89 U
Pentachlorophenol	ug/l	0.3	0.16 U	0.16 U	0.15 U	0.15 U
Phenanthrene	ug/l	100	0.6 U	0.6 U	0.58 U	0.58 U
Phenol	ug/l	2000	0.3 U	0.3 U	0.75 J	7.5 J
Pyrene	ug/l	200	1.7 U	1.7 U	1.6 U	1.6 U
Tentatively Identified Compounds (TICs)						
Benzenesulfonamide, N-butyl-	ug/l					14 NJ
Ethanol, 2-(2-butoxyethoxy)-	ug/l					42 NJ
Unknown	ug/l			11 NJ	7.2 NJ	7.9 NJ

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 8E
SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) IN GROUNDWATER
SALLY'S POND AREA
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	OB-10	OB-29	RW-12 (130-140)	RW-12 (55-65)
PCB-1016	ug/l		0.12 U	0.12 U	0.12 U	0.12 U
PCB-1221	ug/l		0.12 U	0.12 U	0.12 U	0.12 U
PCB-1232	ug/l		0.12 U	0.12 U	0.12 U	0.12 U
PCB-1242	ug/l		0.12 U	0.12 U	0.12 U	0.12 U
PCB-1248	ug/l		0.12 U	0.12 U	0.12 U	0.12 U
PCB-1254	ug/l		0.11 U	0.11 U	0.11 U	0.11 U
PCB-1260	ug/l		0.11 U	0.11 U	0.11 U	0.11 U
PCB-1262	ug/l		0.11 U	0.11 U	0.11 U	0.11 U
PCB-1268	ug/l		0.11 U	0.11 U	0.11 U	0.11 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.12 U	0.12 U	0.12 U	0.12 U

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 9A
SUMMARY OF DECTECTED ORGANIC COMPOUNDS IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
1,1-Dichloroethane	ug/l	50						0.44 J	
1,2-Dichlorobenzene	ug/l	600							0.9 J
1,3-Dichlorobenzene	ug/l	600						0.34 J	3.2
1,4-Dichlorobenzene	ug/l	75						1.5	8.4
Benzene	ug/l	1						10	33
Chlorobenzene	ug/l	50						3.1	21
Chloroethane[1]	ug/l	5					0.51 J	23	8.6
Cyclohexane	ug/l							1.4	2.9
Isopropylbenzene	ug/l	700						1.8	14
Methylcyclohexane	ug/l							0.36 J	0.68 J
Toluene	ug/l	600						0.81 J	0.43 J
Xylenes, Total	ug/l	1000							1.1 J
VOC Tentatively Identified Compounds (TICs)									
1-Pentene, 2-methyl-	ug/l							6.3 NJ	
1-Phenyl-1-butene	ug/l							11 NJ	
2,3-Dihydroindene	ug/l								6 NJ
Benzene, 1,2,3,5-tetramethyl-	ug/l								6.8 NJ
Benzene, 1-ethenyl-4-ethyl-	ug/l								16 NJ
Benzene, 1-methyl-2-(1-methylethyl)-	ug/l								7 NJ
Cyclopentane, methyl-	ug/l								14 NJ
Ethyl ether	ug/l	1000							1.4 NJ
Hexane	ug/l	30							0.75 NJ
Indane	ug/l							11 NJ	
Isopropyl alcohol	ug/l		43 NJ						
Naphthalene	ug/l	300							9.8 NJ
N-Propylbenzene	ug/l								1.7 NJ
p-Diethylbenzene	ug/l								0.5 NJ
Tetrahydrofuran	ug/l	10							4.3 NJ

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.26 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 9A
SUMMARY OF DECTECTED ORGANIC COMPOUNDS IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

SVOC Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
1,4-Dioxane	ug/l	0.4	0.34 B	0.34 B	0.33 B	0.4 B	0.41 B	21	82 J
Naphthalene	ug/l	300						1.4 J	5 J
SVOC Tentatively Identified Compounds (TICs)									
2(3H)-Benzothiazolone	ug/l								7 NJ
Benzene, (1-methylethyl)-	ug/l	700							8.8 NJ
Benzene, chloro-	ug/l	50							9.1 NJ
Benzenesulfonamide, N-cyclohexyl-4-methyl-	ug/l							6.5 NJ	11 NJ
Cyclohexanamine, N-cyclohexyl-	ug/l							12 NJ	26 NJ
Unknown	ug/l							7.7 NJ	35 NJ
PCBs									
None	ug/l								

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)
[1] Interim Generic Groundwater Quality Criteria

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.26 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 9B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
Aluminum	mg/L	0.2	0.015 U	0.015 U	0.0176 J	0.0571	0.12	0.0512	0.0414
Aluminum Dissolved	mg/L	0.2	0.015 U	0.015 U	0.015 U	0.015 U	0.0154 J	0.015 U	0.015 U
Antimony	mg/L	0.006	0.0015 J	0.00062 U	0.00064 J	0.00098 J	0.00063 J	0.00069 J	0.0008 J
Antimony Dissolved	mg/L	0.006	0.00062 UJ	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
Arsenic	mg/L	0.003	0.00077 U	0.00077 U	0.00077 U	0.0011 J	0.00077 U	0.00077 U	0.0041
Arsenic Dissolved	mg/L	0.003	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U
Barium	mg/L	6	0.0663	0.0689	0.0771	0.141	0.014	0.548	0.499
Barium Dissolved	mg/L	6	0.0475 J	0.0502	0.0519	0.0784	0.0106	0.261	0.126
Beryllium	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Beryllium Dissolved	mg/L	0.001	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Cadmium	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.0032	0.00061 U	0.00061 U	0.00061 U
Cadmium Dissolved	mg/L	0.004	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Calcium	mg/L		51	49.3	54.4	83.4	5.68	71.7	96
Calcium Dissolved	mg/L		45.2	47.2	52.2	71.4	5.02	58.2	91.5
Chromium	mg/L	0.07	0.0013 U	0.0013 U	0.0019 J	0.0271	0.0013 U	0.005	0.009
Chromium Dissolved	mg/L	0.07	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Cobalt	mg/L	0.1	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0024 J
Cobalt Dissolved	mg/L	0.1	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Copper	mg/L	1.3	0.0031 J	0.0023 J	0.0058	0.0444	0.004	0.0086	0.0132
Copper Dissolved	mg/L	1.3	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U
Cyanide, Total	mg/L	0.1	0.002 U F	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Iron	mg/L	0.3	14.5	21.2	30.2	22.7	0.615	128	134
Iron Dissolved	mg/L	0.3	0.0457 U	0.617	0.969	0.0457 U	0.078 J	17.6	5.71
Lead	mg/L	0.005	0.00042 J	0.00044 UB	0.0034 B	0.0444 B	0.0017	0.0252	0.0545
Lead Dissolved	mg/L	0.005	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U
Magnesium	mg/L		14.7	16.3	17.4	20.2	1.64	7.03	11.6
Magnesium Dissolved	mg/L		13.3	13.8	14.8	16.5	1.26	5.11	11.9
Manganese	mg/L	0.05	0.776	0.792	0.869	1.24	0.0153	1.37	1.99

TABLE 9B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Units	NJGWQS mg/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
Manganese Dissolved	mg/L	0.05	0.671	0.72	0.798	0.977	0.0099	1.05	1.89
Mercury	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Mercury Dissolved	mg/L	0.002	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Nickel	mg/L	0.1	0.0014 J	0.0016 J	0.0018 J	0.0087	0.0013 U	0.0013 U	0.0048
Nickel Dissolved	mg/L	0.1	0.0013 U	0.0013 U	0.0013 U	0.0042	0.0013 U	0.0013 U	0.0026 J
Potassium	mg/L		2.28	2.29	2.61	7.05	0.53	3.31	7.7
Potassium Dissolved	mg/L		2.06	2.14	2.53	6.04	0.444	2.76	8.03
Selenium	mg/L	0.04	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U
Selenium Dissolved	mg/L	0.04	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U F
Silver	mg/L	0.04	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Silver Dissolved	mg/L	0.04	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Sodium	mg/L	50	92.4	98.6	109	58.9	2.84	9.51	30.2
Sodium Dissolved	mg/L	50	77.8	80.5	89.8	44	2.03	6.42	29.5
Thallium	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Thallium Dissolved	mg/L	0.002	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Vanadium	mg/L		0.0012 U	0.0012 U	0.0012 U	0.0015 J	0.0012 U	0.0089	0.004
Vanadium Dissolved	mg/L		0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U
Zinc	mg/L	2	0.326	1.08	3.44	4.73	1.02	3.29	0.669
Zinc Dissolved	mg/L	2	0.0812	0.523	1.42	0.765	0.907	0.241	0.0912
Wet Chemistry									
Alkalinity	mg/l		146	147	162	334	21.4	351	565
Bicarbonate Alkalinity as CaCO3	mg/l		146	147	162	334	21.4	351	565
Chloride	mg/l	250	184 D	185 D	203 D	74.4 D	1.71	3.77	10.3 D
Sulfate	mg/l	250	6.63	5.21	2.99	0.54 J	3.7	0.63	0.33 U

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)

TABLE 9C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
1,1,1-Trichloroethane	ug/l	30	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-Tetrachloroethane	ug/l	1	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l		0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	ug/l	3	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1-Dichloroethane	ug/l	50	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.44 J	0.26 U
1,1-Dichloroethene	ug/l	1	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2,3-Trichlorobenzene	ug/l		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2,3-Trichloropropane	ug/l	0.03	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
1,2,4-Trichlorobenzene	ug/l	9	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-Dibromo-3-Chloropropane	ug/l	0.02	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichlorobenzene	ug/l	600	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.9 J
1,2-Dichloroethane	ug/l	2	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloropropane	ug/l	1	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	ug/l	600	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 J	3.2
1,4-Dichlorobenzene	ug/l	75	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	1.5	8.4
2-Butanone (MEK)	ug/l	300	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Hexanone	ug/l	40	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
4-Methyl-2-pentanone (MIBK)	ug/l		2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Acetone	ug/l	6000	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	ug/l	1	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	10	33
Bromoform	ug/l	4	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
Bromomethane	ug/l	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l	700	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	ug/l	1	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Chlorobenzene	ug/l	50	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	3.1	21
Chlorobromomethane	ug/l		0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Chlorodibromomethane	ug/l	1	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chloroethane[1]	ug/l	5	0.32 U	0.32 U	0.32 U	0.32 U	0.51 J	23	8.6
Chloroform	ug/l	70	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	ug/l		0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/l	70	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
cis-1,3-Dichloropropene	ug/l		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	ug/l		0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	1.4	2.9
Dichlorobromomethane	ug/l	1	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Dichlorodifluoromethane	ug/l	1000	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Ethylbenzene	ug/l	700	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U

TABLE 9C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
Ethylene Dibromide	ug/l	0.03	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	ug/l	700	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	1.8	14
Methyl acetate	ug/l	7000	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Methyl tert-butyl ether	ug/l	70	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
Methylcyclohexane	ug/l		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.36 J	0.68 J
Methylene Chloride	ug/l	3	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Styrene	ug/l	100	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Tetrachloroethene	ug/l	1	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	ug/l	600	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.81 J	0.43 J
trans-1,2-Dichloroethene	ug/l	100	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
trans-1,3-Dichloropropene	ug/l		0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
Trichloroethene	ug/l	1	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Trichlorofluoromethane	ug/l	2000	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	ug/l	1	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Xylenes, Total	ug/l	1000	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	1.1 J
Tentatively Identified Compounds (TICs)									
1-Pentene, 2-methyl-	ug/l							6.3 NJ	
1-Phenyl-1-butene	ug/l							11 NJ	
2,3-Dihydroindene	ug/l								6 NJ
Benzene, 1,2,3,5-tetramethyl-	ug/l								6.8 NJ
Benzene, 1-ethenyl-4-ethyl-	ug/l								16 NJ
Benzene, 1-methyl-2-(1-methylethyl)-	ug/l								7 NJ
Cyclopentane, methyl-	ug/l								14 NJ
Ethyl ether	ug/l	1000							1.4 NJ
Hexane	ug/l	30							0.75 NJ
Indane	ug/l							11 NJ	
Isopropyl alcohol	ug/l		43 NJ						
Naphthalene	ug/l	300							9.8 NJ
N-Propylbenzene	ug/l								1.7 NJ
p-Diethylbenzene	ug/l								0.5 NJ
Tetrahydrofuran	ug/l	10							4.3 NJ

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C August 2018)
[1] Interim Groundwater Quality Criteria

TABLE 9D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
1,1'-Biphenyl	ug/l	400	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2,4,5-Tetrachlorobenzene	ug/l		1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U
1,4-Dioxane	ug/l	0.4	0.34 B	0.34 B	0.33 B	0.4 B	0.41 B	21	82 J
2,2'-oxybis[1-chloropropane]	ug/l	300	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.64 U
2,3,4,6-Tetrachlorophenol	ug/l	200	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.76 U
2,4,5-Trichlorophenol	ug/l	700	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
2,4,6-Trichlorophenol	ug/l	20	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.31 U
2,4-Dichlorophenol	ug/l	20	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.43 U
2,4-Dimethylphenol	ug/l	100	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
2,4-Dinitrophenol	ug/l	40	14 U	14 U	14 U	14 U	14 U	14 U	15 U
2,4-Dinitrotoluene	ug/l		1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/l		0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.4 U
2-Chloronaphthalene	ug/l	600	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Chlorophenol	ug/l	40	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
2-Methylnaphthalene	ug/l	30	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2-Methylphenol	ug/l		0.26 UJ	0.26 U	0.26 U	0.26 U	0.26 UJ	0.26 UJ	0.26 UJ
2-Nitroaniline	ug/l		0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.48 U
2-Nitrophenol	ug/l		0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.76 U
3,3'-Dichlorobenzidine	ug/l	30	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.5 U
3-Nitroaniline	ug/l		0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.98 UJ
4,6-Dinitro-2-methylphenol	ug/l	1	13 U	13 U	13 U	13 U	13 U	13 U	14 U
4-Bromophenyl phenyl ether	ug/l		0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.76 U
4-Chloro-3-methylphenol	ug/l	100	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.59 U
4-Chloroaniline	ug/l		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Chlorophenyl phenyl ether	ug/l		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
4-Methylphenol	ug/l		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
4-Nitroaniline	ug/l		0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.55 U
4-Nitrophenol	ug/l		0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.7 U
Acenaphthene	ug/l	400	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Acenaphthylene	ug/l	100	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.84 U
Acetophenone	ug/l	700	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.81 U
Anthracene	ug/l	2000	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.65 U
Atrazine	ug/l	3	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.26 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 9D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
Benzaldehyde	ug/l		0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.6 U
Benzo[a]anthracene	ug/l	0.1	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
Benzo[a]pyrene	ug/l	0.1	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U
Benzo[b]fluoranthene	ug/l	0.2	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
Benzo[g,h,i]perylene	ug/l	100	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.5 U
Benzo[k]fluoranthene	ug/l	0.5	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.69 U
Bis(2-chloroethoxy)methane	ug/l		0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Bis(2-chloroethyl)ether	ug/l	7	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.027 U
Bis(2-ethylhexyl) phthalate	ug/l	3	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Butyl benzyl phthalate	ug/l	100	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.87 U
Caprolactam	ug/l	5000	0.68 U	0.68 U	0.68 U	0.68 U	0.68 UJ	0.68 UJ	0.7 U
Carbazole	ug/l		0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.69 U
Chrysene	ug/l	5	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.93 U
Dibenz(a,h)anthracene	ug/l	0.3	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.012 U
Dibenzofuran	ug/l		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Diethyl phthalate	ug/l	6000	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	1 U
Dimethyl phthalate	ug/l	100	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.78 U
Di-n-butyl phthalate	ug/l	700	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.86 U
Di-n-octyl phthalate	ug/l	100	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U
Fluoranthene	ug/l	300	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	0.86 U
Fluorene	ug/l	300	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.93 U
Hexachlorobenzene	ug/l	0.02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
Hexachlorobutadiene	ug/l	1	0.78 UJ	0.78 UJ	0.78 UJ	0.78 UJ	0.78 U	0.78 U	0.8 U
Hexachlorocyclopentadiene	ug/l	40	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U
Hexachloroethane	ug/l	7	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Indeno[1,2,3-cd]pyrene	ug/l	0.2	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.037 U
Isophorone	ug/l	40	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.81 U
Naphthalene	ug/l	300	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.4 J	5 J
Nitrobenzene	ug/l	6	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.58 U
N-Nitrosodimethylamine	ug/l	0.8	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
N-Nitrosodi-n-propylamine	ug/l	10	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.44 U
N-Nitrosodiphenylamine	ug/l	10	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.91 U
Pentachlorophenol	ug/l	0.3	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U
Phenanthrene	ug/l	100	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.59 U
Phenol	ug/l	2000	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U
Pyrene	ug/l	200	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.7 U

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.26 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 9D
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS) IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
Tentatively Identified Compounds (TICs)									
2(3H)-Benzothiazolone	ug/l								7 NJ
Benzene, (1-methylethyl)-	ug/l	700							8.8 NJ
Benzene, chloro-	ug/l	50							9.1 NJ
Benzenesulfonamide, N-cyclohexyl-4-	ug/l							6.5 NJ	11 NJ
Cyclohexanamine, N-cyclohexyl-	ug/l							12 NJ	26 NJ
Unknown	ug/l							7.7 NJ	35 NJ

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9C March 2014)

Note: 1,4-Dioxane was detected in field blank collected 8/24/18 at 0.26 ug/L as indicated by "B" qualifier. Results may be biased high.

TABLE 9E
SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) IN MINE WATER
CANNON AND PETERS MINE
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	CM- 50	CM-100	CM-160	CM-275	PM Air Shaft- 50	PM Air Shaft-180	PM Air Shaft-230
PCB-1016	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1221	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1232	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1242	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1248	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1254	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1260	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1262	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1268	ug/l		0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Polychlorinated biphenyls, Total	ug/l	0.5	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U

TABLE 10A
SUMMARY OF DETECTED ORGANIC COMPOUNDS IN SURFACE WATER
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

VOC Parameter	Result Unit	NJSWQS ug/l	PMP-POND	SR-3 POND	SR-3 SEEP 1	SR-3 SEEP 2	SW-03	SW-04	SW-11	SW-11 DUP	SW-17	SW-MRB-00	SW-MRB-01
2-Butanone (MEK)	ug/l												
Acetone	ug/l		7.6 B	7.4	6	5.5	5.1	5	5.1 B	5.3 B	7.7	6.6	6
Benzene	ug/l	0.15			0.53 J	0.72 J							
Chloroethane	ug/l				1.9	2.9							
Methylene Chloride	ug/l	2.5								0.35 UB		0.39 UB	
VOC Tentatively Identified Compounds (TICs)													
None													

VOC Parameter	Result Unit	NJSWQS ug/l	SW-MRB-02	SW-MRB-03	SW-NOB-01	SW-NOB-02	SW-PAB-00	SW-PAB-01	SW-PAB-01A	SW-PAB-02	SW-PAB-03	SW-PAB-03A	SW-PAB-04
2-Butanone (MEK)	ug/l												
Acetone	ug/l		6.3 B	5.1 B	6.4 B	6.4	6.3	5.6 B	6.1 B	5.3 B	7 B	5.3	5.1
Benzene	ug/l	0.15											
Chloroethane	ug/l												
Methylene Chloride	ug/l	2.5											
VOC Tentatively Identified Compounds (TICs)													
None													

VOC Parameter	Result Unit	NJSWQS ug/l	SW-PMB-01	SW-PMB-01 DUP	SW-PMB-01A	SW-PMB-02	SW-PMB-02A	SW-RC-01	SW-RC-03	SW-RM-01	SW-SP-00	SW-SP-01
2-Butanone (MEK)	ug/l			2.5 UB	2.2 UB							
Acetone	ug/l		6.3	16 B	9.3 B	7.1 B	6	6.6	5.8	9.5	11	6.4
Benzene	ug/l	0.15										
Chloroethane	ug/l											
Methylene Chloride	ug/l	2.5										
VOC Tentatively Identified Compounds (TICs)												
None												

SVOC Parameter	Result Unit	NJSWQS ug/l	SR-3 POND	SR-3 SEEP 1	SR-3 SEEP 2	SW-PAB-00	SW-PAB-01A	SW-PAB-02	SW-PAB-03	SW-PAB-03A	SW-PAB-04
1,4-Dioxane	ug/l		1.4	1.5	1.6	0.41	0.62	0.52	0.44	0.42	0.4
SVOC Tentatively Identified Compounds (TICs)											
None											
PCBs											
None											

See Table 12 for validation qualifiers.
Result exceeds NJGWQS (NJAC 7:9B October 2016)

TABLE 10B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN SURFACE WATER
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJSWQS mg/l	PMP-POND	SR-3 POND	SR-3 SEEP 1	SR-3 SEEP 2	SW-03	SW-04	SW-11	SW-11 DUP	SW-17	SW-MRB-00	SW-MRB-01	SW-MRB-02	SW-MRB-03	SW-NOB-01	SW-NOB-02	SW-PAB-00	SW-PAB-01
Aluminum	mg/L		0.015 U	0.015 U	0.0682	0.0637	0.0488	0.0353 J	0.0499	0.0495	0.0517	0.191	0.0854	0.0911	0.0478	3.02	0.208	0.0329 J	0.161
Aluminum Dissolved	mg/L		0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.0165 J	0.015 U	0.015 U	0.015 U	0.015 U	0.0196 J	0.015 U	0.0229 J
Antimony	mg/L	0.0056	0.00093 J	0.00092 J	0.0009 J	0.00093 J	0.00067 J	0.00079 J	0.00088 J	0.00097 J	0.00074 J	0.0008 J	0.00085 J	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00075 J
Antimony Dissolved	mg/L	0.0056	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
Arsenic	mg/L	0.000017	0.00077 U	0.00077 U	0.0014 J	0.0012 J	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U
Arsenic Dissolved	mg/L	0.000017	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U
Barium	mg/L	2	0.0942	0.122	0.198	0.186	0.0095	0.0123	0.0075	0.0075	0.0133	0.0098	0.0091	0.011	0.0099	0.0657	0.0081	0.0523	0.0078
Barium Dissolved	mg/L	2	0.0757	0.102	0.147	0.142	0.0074	0.0124	0.0068	0.0066	0.0126	0.0081	0.0077	0.0086	0.0083	0.0148	0.0072	0.0459	0.0069
Beryllium	mg/L	0.006	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00042 J	0.00026 U	0.00026 U	0.00026 U
Beryllium Dissolved	mg/L	0.006	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Cadmium	mg/L	0.0034	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Cadmium Dissolved	mg/L	0.0034	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Calcium	mg/L		20	25.2	21.9	21.2	9.31	20.4	6.99	7.11	20.6	4.07	4.11	4.92	6.69	7.99	7.81	10.9	7.24
Calcium Dissolved	mg/L		17.5	24.7	20.4	19.5	8.84	21.7	6.78	6.67	22.5	4.23	3.92	4.51	6.24	6.74	8.49	10.5	6.97
Chromium	mg/L	0.092	0.0013 U	0.0013 U	0.0022 J	0.0019 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0039 J	0.0013 U	0.0013 U	0.0013 U
Chromium Dissolved	mg/L	0.092	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Cobalt	mg/L		0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0018 J	0.0013 U	0.0013 U	0.0013 U
Cobalt Dissolved	mg/L		0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Copper	mg/L	1.3	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0022 J	0.002 J	0.0019 U	0.0019 U	0.0024 J	0.0029 J	0.0024 J	0.0021 J	0.0021 J	0.0072	0.0039 J	0.0019 U	0.0019 U
Copper Dissolved	mg/L	1.3	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U
Cyanide, Total	mg/L	0.14	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Iron	mg/L		5.72	1.57	45.8	36	0.784	0.431	0.256	0.261	0.602	0.363	0.341	0.886	0.432	3.14	0.324	11.4	0.257
Iron Dissolved	mg/L		0.0906 J	0.0457 U	0.0457 U	0.0457 U	0.189	0.073 J	0.116 J	0.114 J	0.0706 J	0.0654 J	0.0687 J	0.173	0.108 J	0.0457 U	0.0625 J	0.0457 U	0.0588 J
Lead	mg/L	0.005	0.00037 U	0.00037 U	0.0011 J	0.00096 J	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00047 J	0.00037 U	0.00038 J	0.00037 U	0.0095	0.00046 J	0.00037 U	0.00037 U
Lead Dissolved	mg/L	0.005	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U
Magnesium	mg/L		3.14	4.13	3.45	3.32	3.32	6.09	2.22	2.25	6.12	1.61	1.61	1.93	2.63	2.69	3.54	2.8	2.26
Magnesium Dissolved	mg/L		2.76	4.05	3.26	3.09	3.26	6.27	2.12	2.06	6.48	1.68	1.56	1.71	2.32	2.03	3.62	2.47	2.15
Manganese	mg/L		0.352	1.18	0.644	0.618	0.147	0.0694	0.0403	0.0403	0.12	0.041	0.0333	0.168	0.087	0.866	0.0217	0.246	0.023
Manganese Dissolved	mg/L		0.143	0.237	0.537	0.534	0.0602	0.0254	0.024	0.0239	0.045	0.0186	0.0049 J	0.0608	0.0198	0.0027 U	0.0027 U	0.225	0.0027 U
Mercury	mg/L	0.00005	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Mercury Dissolved	mg/L	0.00005	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Nickel	mg/L	0.5	0.0013 U	0.0013 U	0.0015 J	0.0014 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0048	0.0013 U	0.0013 U	0.0014 J
Nickel Dissolved	mg/L	0.5	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Potassium	mg/L		4.31	1.92	1.61	1.58	0.3	1.7	0.402	0.416	1.74	0.446	0.454	0.205	0.319	0.939	0.678	0.679	0.464
Potassium Dissolved	mg/L		3.76	1.85	1.51	1.43	0.267	1.73	0.368	0.366	1.76	0.438	0.42	0.174 J	0.277	0.704	0.676	0.619	0.386
Selenium	mg/L	0.17	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U
Selenium Dissolved	mg/L	0.17	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U
Silver	mg/L	0.17	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Silver Dissolved	mg/L	0.17	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Sodium	mg/L		2.33	3.56	3.73	3.87	24.5	42.2	3.29	3.34	40.5	2.93	3.02	3.47	9.81	2.93	2.97	3.46	3.5
Sodium Dissolved	mg/L		2.01	3.46	3.34	3.21	24.3	44	3.1	3.06	43.3	2.77	2.64	2.9	9.35	2.6	2.96	3.07	3.32
Thallium	mg/L	0.00024	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Thallium Dissolved	mg/L	0.00024	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Vanadium	mg/L		0.0012 U	0.0012 U	0.0036 J	0.0029 J	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0069	0.0012 J	0.0012 U	0.0012 U
Vanadium Dissolved	mg/L		0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U
Zinc	mg/L	7.4	0.0054 U	0.0054 U	0.0054 J	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0095 J	0.0054 U	0.103	0.0054 U	0.0054 U	0.0054 U
Zinc Dissolved	mg/L	7.4	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
Wet Chemistry																			
Alkalinity	mg/l		67.8	90.2	78.6	92	30.5	68.1	25.7	27.2	69.6	14.3	13.6	17.1	21.4	25.3	32.6	41.8	26.2
Bicarbonate Alkalinity as	mg/l		67.8	90.2	78.6	92	30.5	68.1	25.7	27.2	69.6	14.3	13.6	17.1	21.4	25.3	32.6	41.8	26.2
Chloride	mg/l	250	1.48	2.18	1.83	1.85	37 D	58 D	1.69	1.68	59.4 D	1.65	1.59	2.17	13.8 D	1.26	1.65	1.81	1.7
Sulfate	mg/l		0.33 U	0.63	0.99	1.04	3.02	4.67	4.48	4.49	4.53	4.15	3.98	3.34	3.96	5.57	3.95	3.03	4.21

See Table 12 for validation qualifiers.
Result exceeds NJSWQS (NJAC 7:9B October 2016)

TABLE 10B
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN SURFACE WATER
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJSWQS mg/l	SW-PAB-01A	SW-PAB-02	SW-PAB-03	SW-PAB-03A	SW-PAB-04	SW-PMB-01	SW-PMB-01 DUP	SW-PMB-01A	SW-PMB-02	SW-PMB-02A	SW-RC-01	SW-RC-02	SW-RC-03	SW-RM-01	SW-SP-00	SW-SP-01
Aluminum	mg/L		0.0281 J	1.47	0.0155 J	0.044	0.0627	0.0201 J	0.0233 J	0.0825	0.0241 J	0.0387 J	0.0486	0.0387 J	0.0369 J	0.106	0.0547	0.0341 J
Aluminum Dissolved	mg/L		0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.0197 J	0.015 U	0.015 U
Antimony	mg/L	0.0056	0.00098 J	0.00062 U	0.00062 U	0.00088 J	0.00072 J	0.00062 U	0.00062 U	0.00085 J	0.00062 U	0.00062 U	0.00078 J	0.00082 J	0.00086 J	0.00062 U	0.00062 U	0.00078 J
Antimony Dissolved	mg/L	0.0056	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
Arsenic	mg/L	0.000017	0.00077 U	0.0054	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U
Arsenic Dissolved	mg/L	0.000017	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U	0.00077 U
Barium	mg/L	2	0.0552	0.0741	0.0464	0.021	0.0215	0.0542	0.0524	0.0401	0.0172	0.0167	0.0087	0.009	0.0091	0.0087	0.0095	0.0104
Barium Dissolved	mg/L	2	0.0459	0.0379	0.0401	0.0199	0.019	0.0451	0.045	0.0341	0.0167	0.0189	0.0082	0.0095	0.0094	0.0086	0.0079	0.0095
Beryllium	mg/L	0.006	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Beryllium Dissolved	mg/L	0.006	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U	0.00026 U
Cadmium	mg/L	0.0034	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Cadmium Dissolved	mg/L	0.0034	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U
Calcium	mg/L		14.2	19.3	18.4	17.7	17.2	37.9	38	39.5	40.5	34.5	8.18	8.87	8.68	6.89	8.77	8.82
Calcium Dissolved	mg/L		13.1	15.2	17.6	19.1	18.7	39.9	37.8	38.9	40.6	38.6	9.09	9.1	9.66	8.48	8.45	9.6
Chromium	mg/L	0.092	0.0013 U	0.0023 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Chromium Dissolved	mg/L	0.092	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Cobalt	mg/L		0.0013 U	0.0023 J	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Cobalt Dissolved	mg/L		0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Copper	mg/L	1.3	0.0019 U	0.0147	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0026 J	0.002 J	0.004	0.0019 U	0.0019 U	0.0019 U	0.0043	0.0044	0.0019 U
Copper Dissolved	mg/L	1.3	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U
Cyanide, Total	mg/L	0.14	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.0021 J	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 UJ
Iron	mg/L		6.65	8.09	3.87	1.08	0.922	10.8	11	3.12	0.488	0.355	0.416	0.48	0.461	0.328	0.474	0.516
Iron Dissolved	mg/L		0.0457 U	0.495	0.397	0.116 J	0.0924 J	0.0602 J	0.0858 J	0.0457 U	0.0457 U	0.0457 U	0.158	0.168	0.197	0.108 J	0.161	0.205
Lead	mg/L	0.005	0.00037 U	0.0055	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00044 J	0.00037 U	0.0005 J	0.00037 U	0.00037 U	0.00037 U	0.0015	0.00037 U	0.00037 U
Lead Dissolved	mg/L	0.005	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U	0.00037 U
Magnesium	mg/L		3.12	4.47	3.94	3.83	3.76	8.21	8.24	8.37	11.3	9.89	2.53	2.67	2.66	2.23	2.75	2.7
Magnesium Dissolved	mg/L		2.89	3.13	3.52	4.06	3.97	8.08	7.79	8.35	10.6	10.5	2.69	2.74	2.83	2.64	2.5	2.83
Manganese	mg/L		0.544	0.982	0.853	0.0707	0.0851	2.22	2.23	2	0.279	0.211	0.0582	0.0788	0.0694	0.0472	0.0475	0.105
Manganese Dissolved	mg/L		0.459	0.0088	0.755	0.0027 U	0.0027 U	2.28	2.19	1.78	0.19	0.128	0.0064 J	0.0131	0.0137	0.0027 U	0.0027 U	0.0259
Mercury	mg/L	0.00005	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Mercury Dissolved	mg/L	0.00005	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Nickel	mg/L	0.5	0.0013 U	0.004	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Nickel Dissolved	mg/L	0.5	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
Potassium	mg/L		0.932	1.28	0.502	0.732	0.747	6.37	6.35	7.18	5.46	4.34	0.584	0.696	0.698	0.589	0.657	0.681
Potassium Dissolved	mg/L		0.829	1.08	0.457	0.766	0.769	6.8	6.45	7.13	5.44	4.68	0.605	0.68	0.697	0.688	0.618	0.685
Selenium	mg/L	0.17	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U
Selenium Dissolved	mg/L	0.17	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U
Silver	mg/L	0.17	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Silver Dissolved	mg/L	0.17	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U
Sodium	mg/L		3.78	5.67	6.14	5.39	5.31	27.8	27.6	39.2	41.9	39.9	14.7	14.9	14.9	16	14.6	14.9
Sodium Dissolved	mg/L		3.38	5.37	5.39	5.62	5.53	28.9	27	40.1	40	40.7	15.3	15.5	15.7	16.2	13.8	15.6
Thallium	mg/L	0.00024	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Thallium Dissolved	mg/L	0.00024	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
Vanadium	mg/L		0.0012 U	0.0075	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U
Vanadium Dissolved	mg/L		0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U
Zinc	mg/L	7.4	0.0054 U	0.0233	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
Zinc Dissolved	mg/L	7.4	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
Wet Chemistry																		
Alkalinity	mg/l		53.5	57.3	65.6	61.4	59.9	152	157	150	142	122	22.7	24.6	25	21.1	25.2	25.3
Bicarbonate Alkalinity as	mg/l		53.5	57.3	65.6	61.4	59.9	152	157	150	142	122	22.7	24.6	25	21.1	25.2	25.3
Chloride	mg/l	250	1.98	5.24	5.6	5.41	5.25	32.9 D	34.6 D	50.7 D	54.6 D	53.2 D	21.8 D	22.2 D	22.2 D	23.3 D	22.1 D	21.7 D
Sulfate	mg/l		2.49	2.18	1.24	1.92	2.02	2.6	2.41	1.83	5.24	5.14	4.58	4.63	4.65	5.03	4.58	4.62

See Table 12 for validation qualifiers.
Result exceeds NJSWQS (NJAC 7:9B October

TABLE 10C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN SURFACE WATER
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJSWQS ug/l	PMP-POND	SR-3 POND	SR-3 SEEP 1	SR-3 SEEP 2	SW-03	SW-04	SW-11	SW-11 DUP	SW-17	SW-MRB-00	SW-MRB-01	SW-MRB-02	SW-MRB-03
1,1,1-Trichloroethane	ug/l	120	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-Tetrachloroethane	ug/l	4.7	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l		0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	ug/l	13	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1-Dichloroethane	ug/l		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloroethene	ug/l	4.7	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2,3-Trichlorobenzene	ug/l		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2,3-Trichloropropane	ug/l		0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
1,2,4-Trichlorobenzene	ug/l	21	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-Dibromo-3-Chloropropane	ug/l		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichlorobenzene	ug/l	2000	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloroethane	ug/l	0.29	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloropropane	ug/l	0.5	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	ug/l	2200	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,4-Dichlorobenzene	ug/l	550	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
2-Butanone (MEK)	ug/l		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Hexanone	ug/l		2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
4-Methyl-2-pentanone (MIBK)	ug/l		2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Acetone	ug/l		7.6 B	7.4	6	5.5	5.1	5	5.1 B	5.3 B	7.7	6.6	6	6.3 B	5.1 B
Benzene	ug/l	0.15	0.43 U	0.43 U	0.53 J	0.72 J	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Bromoform	ug/l	4.3	0.54 UJ	0.54 U	0.54 U	0.54 U	0.54 UJ	0.54 UJ	0.54 UJ	0.54 UJ	0.54 U	0.54 UJ	0.54 UJ	0.54 UJ	0.54 UJ
Bromomethane	ug/l	47	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l		0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	ug/l	0.33	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Chlorobenzene	ug/l	210	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Chlorobromomethane	ug/l		0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Chlorodibromomethane	ug/l	0.4	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chloroethane	ug/l		0.32 U	0.32 U	1.9	2.9	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Chloroform	ug/l	68	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	ug/l		0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/l		0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
cis-1,3-Dichloropropene	ug/l		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	ug/l		0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Dichlorobromomethane	ug/l	0.55	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Dichlorodifluoromethane	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Ethylbenzene	ug/l	530	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Ethylene Dibromide	ug/l		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	ug/l		0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Methyl acetate	ug/l		0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Methyl tert-butyl ether	ug/l	70	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
Methylcyclohexane	ug/l		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Methylene Chloride	ug/l	2.5	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.35 UB	0.32 U	0.39 UB	0.32 U	0.32 U	0.32 U
Styrene	ug/l		0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Tetrachloroethene	ug/l	0.34	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	ug/l	1300	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
trans-1,2-Dichloroethene	ug/l	590	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
trans-1,3-Dichloropropene	ug/l		0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
Trichloroethene	ug/l	1	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Trichlorofluoromethane	ug/l		0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	ug/l	0.082	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Xylenes, Total	ug/l		0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Tentatively Identified Compounds (TICs)															
None															

See Table 12 for validation qualifiers.
Result exceeds NJSWQS (NJAC 7:9B October 2016)

TABLE 10C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN SURFACE WATER
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJSWQS ug/l	SW-NOB-01	SW-NOB-02	SW-PAB-00	SW-PAB-01	SW-PAB-01A	SW-PAB-02	SW-PAB-03	SW-PAB-03A	SW-PAB-04	SW-PMB-01	SW-PMB-01 DUP	SW-PMB-01A	SW-PMB-02
1,1,1-Trichloroethane	ug/l	120	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-Tetrachloroethane	ug/l	4.7	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l		0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	ug/l	13	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1-Dichloroethane	ug/l		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloroethene	ug/l	4.7	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2,3-Trichlorobenzene	ug/l		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2,3-Trichloropropane	ug/l		0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
1,2,4-Trichlorobenzene	ug/l	21	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-Dibromo-3-Chloropropane	ug/l		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichlorobenzene	ug/l	2000	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloroethane	ug/l	0.29	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloropropane	ug/l	0.5	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	ug/l	2200	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,4-Dichlorobenzene	ug/l	550	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
2-Butanone (MEK)	ug/l		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.5 UB	2.2 UB	1.9 U
2-Hexanone	ug/l		2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
4-Methyl-2-pentanone (MIBK)	ug/l		2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Acetone	ug/l		6.4 B	6.4	6.3	5.6 B	6.1 B	5.3 B	7 B	5.3	5.1	6.3	16 B	9.3 B	7.1 B
Benzene	ug/l	0.15	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Bromoform	ug/l	4.3	0.54 UJ	0.54 UJ	0.54 U	0.54 UJ	0.54 UJ	0.54 UJ	0.54 UJ	0.54 UJ	0.54 U	0.54 UJ	0.54 UJ	0.54 UJ	0.54 UJ
Bromomethane	ug/l	47	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l		0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	ug/l	0.33	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Chlorobenzene	ug/l	210	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Chlorobromomethane	ug/l		0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Chlorodibromomethane	ug/l	0.4	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chloroethane	ug/l		0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Chloroform	ug/l	68	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	ug/l		0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/l		0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
cis-1,3-Dichloropropene	ug/l		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	ug/l		0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Dichlorobromomethane	ug/l	0.55	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Dichlorodifluoromethane	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Ethylbenzene	ug/l	530	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Ethylene Dibromide	ug/l		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	ug/l		0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Methyl acetate	ug/l		0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Methyl tert-butyl ether	ug/l	70	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
Methylcyclohexane	ug/l		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Methylene Chloride	ug/l	2.5	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Styrene	ug/l		0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Tetrachloroethene	ug/l	0.34	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	ug/l	1300	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
trans-1,2-Dichloroethene	ug/l	590	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
trans-1,3-Dichloropropene	ug/l		0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
Trichloroethene	ug/l	1	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Trichlorofluoromethane	ug/l		0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	ug/l	0.082	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Xylenes, Total	ug/l		0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Tentatively Identified Compounds (TICs)															
None															

See Table 12 for validation qualifiers.
Result exceeds NJSWQS (NJAC 7:9B October 2016)

TABLE 10C
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN SURFACE WATER
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJSWQS ug/l	SW-PMB-02A	SW-RC-01	SW-RC-02	SW-RC-03	SW-RM-01	SW-SP-00	SW-SP-01
1,1,1-Trichloroethane	ug/l	120	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-Tetrachloroethane	ug/l	4.7	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l		0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	ug/l	13	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1-Dichloroethane	ug/l		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloroethene	ug/l	4.7	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2,3-Trichlorobenzene	ug/l		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2,3-Trichloropropane	ug/l		0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
1,2,4-Trichlorobenzene	ug/l	21	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-Dibromo-3-Chloropropane	ug/l		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichlorobenzene	ug/l	2000	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloroethane	ug/l	0.29	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloropropane	ug/l	0.5	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	ug/l	2200	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,4-Dichlorobenzene	ug/l	550	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
2-Butanone (MEK)	ug/l		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Hexanone	ug/l		2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
4-Methyl-2-pentanone (MIBK)	ug/l		2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Acetone	ug/l		6	6.6	5 U	5.8	9.5	11	6.4
Benzene	ug/l	0.15	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Bromoform	ug/l	4.3	0.54 U	0.54 UJ	0.54 UJ	0.54 UJ	0.54 UJ	0.54 UJ	0.54 UJ
Bromomethane	ug/l	47	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l		0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	ug/l	0.33	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Chlorobenzene	ug/l	210	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Chlorobromomethane	ug/l		0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Chlorodibromomethane	ug/l	0.4	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chloroethane	ug/l		0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Chloroform	ug/l	68	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	ug/l		0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/l		0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
cis-1,3-Dichloropropene	ug/l		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	ug/l		0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Dichlorobromomethane	ug/l	0.55	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Dichlorodifluoromethane	ug/l		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Ethylbenzene	ug/l	530	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Ethylene Dibromide	ug/l		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	ug/l		0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Methyl acetate	ug/l		0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Methyl tert-butyl ether	ug/l	70	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
Methylcyclohexane	ug/l		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Methylene Chloride	ug/l	2.5	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Styrene	ug/l		0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Tetrachloroethene	ug/l	0.34	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	ug/l	1300	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
trans-1,2-Dichloroethene	ug/l	590	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
trans-1,3-Dichloropropene	ug/l		0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
Trichloroethene	ug/l	1	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Trichlorofluoromethane	ug/l		0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	ug/l	0.082	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Xylenes, Total	ug/l		0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Tentatively Identified Compounds (TICs)									
None									

See Table 12 for validation qualifiers.
Result exceeds NJSWQS (NJAC 7:9B October 2016)

TABLE 10D
SUMMARY OF 1,4-DIOXANE CONCENTRATIONS IN SURFACE WATER
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJSWQS ug/l	PMP-POND	SR-3 POND	SR-3 SEEP 1	SR-3 SEEP 2	SW-03	SW-04	SW-11	SW-11 DUP	SW-17
1,4-Dioxane	ug/l		0.016 U	1.4	1.5	1.6	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
Parameter	**Result Unit**	**NJSWQS ug/l**	**SW-MRB-00**	**SW-MRB-01**	**SW-MRB-02**	**SW-MRB-03**	**SW-NOB-01**	**SW-NOB-02**	**SW-PAB-00**	**SW-PAB-01**	**SW-PAB-01A**
1,4-Dioxane	ug/l		0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.41	0.016 U	0.62
Parameter	**Result Unit**	**NJSWQS ug/l**	**SW-PAB-02**	**SW-PAB-03**	**SW-PAB-03A**	**SW-PAB-04**	**SW-PMB-01**	**SW-PMB-01 DUP**	**SW-PMB-01A**	**SW-PMB-02**	**SW-PMB-02A**
1,4-Dioxane	ug/l		0.52	0.44	0.42	0.4	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
Parameter	**Result Unit**	**NJSWQS ug/l**	**SW-RC-01**	**SW-RC-02**	**SW-RC-03**	**SW-RM-01**	**SW-SP-00**	**SW-SP-01**			
1,4-Dioxane	ug/l		0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U			

See Table 12 for validation qualifiers.
Result exceeds NJSWQS (NJAC 7:9B October 2016)

TABLE 11A
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN FIELD AND TRIP BLANKS
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	FB-01-082118FB	FB-03-082318FB	FB-03-082418FB	FB-04-083118	TB-01-082218TB	TB-01-082718TB	TB-01-09052018 TB	TB-02-082318TB
1,1,1-Trichloroethane	ug/l	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-Tetrachloroethane	ug/l	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	ug/l	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1-Dichloroethane	ug/l	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloroethene	ug/l	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2,3-Trichlorobenzene	ug/l	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2,3-Trichloropropane	ug/l	0.003 U	0.003 U	0.003 U	0.003 U			0.003 U	0.003 U
1,2,4-Trichlorobenzene	ug/l	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-Dibromo-3-Chloropropane	ug/l	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichlorobenzene	ug/l	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloroethane	ug/l	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloropropane	ug/l	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	ug/l	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,4-Dichlorobenzene	ug/l	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
2-Butanone (MEK)	ug/l	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Hexanone	ug/l	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
4-Methyl-2-pentanone (MIBK)	ug/l	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Acetone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	ug/l	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Bromoform	ug/l	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 UJ	0.54 U	0.54 U
Bromomethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l	0.16 U	0.51 UB	0.16 U	1	0.16 U	0.16 U	0.16 U	0.54 J
Carbon tetrachloride	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Chlorobenzene	ug/l	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Chlorobromomethane	ug/l	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Chlorodibromomethane	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chloroethane	ug/l	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Chloroform	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
cis-1,3-Dichloropropene	ug/l	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	ug/l	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U

TABLE 11A
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN FIELD AND TRIP BLANKS
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	FB-01-082118FB	FB-03-082318FB	FB-03-082418FB	FB-04-083118	TB-01-082218TB	TB-01-082718TB	TB-01-09052018TB	TB-02-082318TB
Dichlorobromomethane	ug/l	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Dichlorodifluoromethane	ug/l	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Ethylbenzene	ug/l	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Ethylene Dibromide	ug/l	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	ug/l	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Methyl acetate	ug/l	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Methyl tert-butyl ether	ug/l	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
Methylcyclohexane	ug/l	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Methylene Chloride	ug/l	4.3	1.5	1.8	4.9	0.32 U	0.34 J	0.32 U	0.32 U
Styrene	ug/l	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Tetrachloroethene	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	ug/l	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
trans-1,2-Dichloroethene	ug/l	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
trans-1,3-Dichloropropene	ug/l	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
Trichloroethene	ug/l	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Trichlorofluoromethane	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Xylenes, Total	ug/l	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U

TABLE 11A
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN FIELD AND TRIP BLANKS
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	TB-03-082418TB	TB-04-082918TB	TB-05-083018TB	TB-06-083118TB
1,1,1-Trichloroethane	ug/l	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-Tetrachloroethane	ug/l	0.37 U	0.37 U	0.37 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.31 U	0.31 U	0.31 U	0.31 U
1,1,2-Trichloroethane	ug/l	0.43 U	0.43 U	0.43 U	0.43 U
1,1-Dichloroethane	ug/l	0.26 U	0.26 U	0.26 U	0.26 U
1,1-Dichloroethene	ug/l	0.12 U	0.12 U	0.12 U	0.12 U
1,2,3-Trichlorobenzene	ug/l	0.36 U	0.36 U	0.36 U	0.36 U
1,2,3-Trichloropropane	ug/l	0.003 U	0.003 U	0.003 U	0.003 U
1,2,4-Trichlorobenzene	ug/l	0.37 U	0.37 U	0.37 U	0.37 U
1,2-Dibromo-3-Chloropropane	ug/l	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichlorobenzene	ug/l	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloroethane	ug/l	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dichloropropane	ug/l	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	ug/l	0.34 U	0.34 U	0.34 U	0.34 U
1,4-Dichlorobenzene	ug/l	0.76 U	0.76 U	0.76 U	0.76 U
2-Butanone (MEK)	ug/l	1.9 U	1.9 U	1.9 U	1.9 U
2-Hexanone	ug/l	2.9 U	2.9 U	2.9 U	2.9 U
4-Methyl-2-pentanone (MIBK)	ug/l	2.7 U	2.7 U	2.7 U	2.7 U
Acetone	ug/l	5 U	5 U	5 U	5 U
Benzene	ug/l	0.43 U	0.43 U	0.43 U	0.43 U
Bromoform	ug/l	0.54 U	0.54 U	0.54 U	0.54 U
Bromomethane	ug/l	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	ug/l	0.21 U	0.21 U	0.21 U	0.21 U
Chlorobenzene	ug/l	0.38 U	0.38 U	0.38 U	0.38 U
Chlorobromomethane	ug/l	0.41 U	0.41 U	0.41 U	0.41 U
Chlorodibromomethane	ug/l	0.28 U	0.28 U	0.28 U	0.28 U
Chloroethane	ug/l	0.32 U	0.32 U	0.32 U	0.32 U
Chloroform	ug/l	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	ug/l	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/l	0.22 U	0.22 U	0.22 U	0.22 U
cis-1,3-Dichloropropene	ug/l	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	ug/l	0.32 U	0.32 U	0.32 U	0.32 U

TABLE 11A
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) IN FIELD AND TRIP BLANKS
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	TB-03-082418TB	TB-04-082918TB	TB-05-083018TB	TB-06-083118TB
Dichlorobromomethane	ug/l	0.34 U	0.34 U	0.34 U	0.34 U
Dichlorodifluoromethane	ug/l	0.12 U	0.12 U	0.12 U	0.12 U
Ethylbenzene	ug/l	0.3 U	0.3 U	0.3 U	0.3 U
Ethylene Dibromide	ug/l	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	ug/l	0.34 U	0.34 U	0.34 U	0.34 U
Methyl acetate	ug/l	0.31 U	0.31 U	0.31 U	0.31 U
Methyl tert-butyl ether	ug/l	0.47 U	0.47 U	0.47 U	0.47 U
Methylcyclohexane	ug/l	0.26 U	0.26 U	0.26 U	0.26 U
Methylene Chloride	ug/l	0.36 J	0.32 U	0.32 U	0.32 U
Styrene	ug/l	0.42 U	0.42 U	0.42 U	0.42 U
Tetrachloroethene	ug/l	0.25 U	0.25 U	0.25 U	0.25 U
Toluene	ug/l	0.38 U	0.38 U	0.38 U	0.38 U
trans-1,2-Dichloroethene	ug/l	0.24 U	0.24 U	0.24 U	0.24 U
trans-1,3-Dichloropropene	ug/l	0.49 U	0.49 U	0.49 U	0.49 U
Trichloroethene	ug/l	0.31 U	0.31 U	0.31 U	0.31 U
Trichlorofluoromethane	ug/l	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	ug/l	0.17 U	0.17 U	0.17 U	0.17 U
Xylenes, Total	ug/l	0.65 U	0.65 U	0.65 U	0.65 U

TABLE 11B
SUMMARY OF SEMI VOLATILE ORGANIC COMPOUNDS (SVOCS) IN FIELD BLANKS
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	FB-01-082118FB	FB-03-082318FB	FB-03-082418FB	FB-04-083118
1,1'-Biphenyl	ug/l	1.2 U	1.2 U	1.2 U	1.2 U
1,2,4,5-Tetrachlorobenzene	ug/l	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dioxane	ug/l	0.016 U	0.016 U	0.26	0.016 U
2,2'-oxybis[1-chloropropane]	ug/l	0.63 U	0.63 U	0.63 U	0.63 U
2,3,4,6-Tetrachlorophenol	ug/l	0.75 U	0.75 U	0.75 U	0.75 U
2,4,5-Trichlorophenol	ug/l	0.28 U	0.28 U	0.28 U	0.28 U
2,4,6-Trichlorophenol	ug/l	0.3 U	0.3 U	0.3 U	0.3 U
2,4-Dichlorophenol	ug/l	0.42 U	0.42 U	0.42 U	0.42 U
2,4-Dimethylphenol	ug/l	0.24 U	0.24 U	0.24 U	0.24 U
2,4-Dinitrophenol	ug/l	14 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/l	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/l	0.39 U	0.39 U	0.39 U	0.39 U
2-Chloronaphthalene	ug/l	1.2 U	1.2 U	1.2 U	1.2 U
2-Chlorophenol	ug/l	0.38 U	0.38 U	0.38 U	0.38 U
2-Methylnaphthalene	ug/l	1.1 U	1.1 U	1.1 U	1.1 U
2-Methylphenol	ug/l	0.26 UJ	0.26 UJ	0.26 UJ	0.26 U
2-Nitroaniline	ug/l	0.47 U	0.47 U	0.47 U	0.47 U
2-Nitrophenol	ug/l	0.75 U	0.75 U	0.75 U	0.75 U
3,3'-Dichlorobenzidine	ug/l	1.4 U	1.4 U	1.4 U	1.4 U
3-Nitroaniline	ug/l	0.96 U	0.96 U	0.96 U	0.96 U
4,6-Dinitro-2-methylphenol	ug/l	13 U	13 U	13 U	13 U
4-Bromophenyl phenyl ether	ug/l	0.75 U	0.75 U	0.75 U	0.75 U
4-Chloro-3-methylphenol	ug/l	0.58 U	0.58 U	0.58 U	0.58 U
4-Chloroaniline	ug/l	1.9 U	1.9 U	1.9 U	1.9 U
4-Chlorophenyl phenyl ether	ug/l	1.3 U	1.3 U	1.3 U	1.3 U
4-Methylphenol	ug/l	0.24 U	0.24 U	0.24 U	0.24 U
4-Nitroaniline	ug/l	0.54 U	0.54 U	0.54 U	0.54 U
4-Nitrophenol	ug/l	0.69 U	0.69 U	0.69 U	0.69 U
Acenaphthene	ug/l	1.1 U	1.1 U	1.1 U	1.1 U
Acenaphthylene	ug/l	0.82 U	0.82 U	0.82 U	0.82 U
Acetophenone	ug/l	0.79 U	0.79 U	0.79 U	0.79 U
Anthracene	ug/l	0.63 U	0.63 U	0.63 U	0.63 U
Atrazine	ug/l	1.3 U	1.3 U	1.3 U	1.3 U
Benzaldehyde	ug/l	0.59 U	0.59 U	0.59 U	0.59 U
Benzo[a]anthracene	ug/l	0.016 U	0.016 U	0.016 U	0.016 U
Benzo[a]pyrene	ug/l	0.022 U	0.022 U	0.022 U	0.022 U
Benzo[b]fluoranthene	ug/l	0.024 U	0.024 U	0.024 U	0.024 U
Benzo[g,h,i]perylene	ug/l	1.4 U	1.4 U	1.4 U	1.4 U
Benzo[k]fluoranthene	ug/l	0.67 U	0.67 U	0.67 U	0.67 U
Bis(2-chloroethoxy)methane	ug/l	0.24 U	0.24 U	0.24 U	0.24 U
Bis(2-chloroethyl)ether	ug/l	0.026 U	0.026 U	0.026 U	0.026 U
Bis(2-ethylhexyl) phthalate	ug/l	1.7 U	1.7 U	1.7 U	1.7 U
Butyl benzyl phthalate	ug/l	0.85 U	0.85 U	0.85 U	0.85 U
Caprolactam	ug/l	0.68 UJ	0.68 UJ	0.68 UJ	0.68 U
Carbazole	ug/l	0.68 U	0.68 U	0.68 U	0.68 U
Chrysene	ug/l	0.91 U	0.91 U	0.91 U	0.91 U
Dibenz(a,h)anthracene	ug/l	0.011 U	0.011 U	0.011 U	0.011 U
Dibenzofuran	ug/l	1.1 U	1.1 U	1.1 U	1.1 U

TABLE 11B
SUMMARY OF SEMI VOLATILE ORGANIC COMPOUNDS (SVOCS) IN FIELD BLANKS
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	FB-01-082118FB	FB-03-082318FB	FB-03-082418FB	FB-04-083118
Diethyl phthalate	ug/l	0.98 U	0.98 U	0.98 U	0.98 U
Dimethyl phthalate	ug/l	0.77 U	0.77 U	0.77 U	0.77 U
Di-n-butyl phthalate	ug/l	0.84 U	0.84 U	0.84 U	0.84 U
Di-n-octyl phthalate	ug/l	4.8 U	4.8 U	4.8 U	4.8 U
Fluoranthene	ug/l	0.84 U	0.84 U	0.84 U	0.84 U
Fluorene	ug/l	0.91 U	0.91 U	0.91 U	0.91 U
Hexachlorobenzene	ug/l	0.013 U	0.013 U	0.013 U	0.013 U
Hexachlorobutadiene	ug/l	0.78 U	0.78 U	0.78 U	0.78 UJ
Hexachlorocyclopentadiene	ug/l	1.7 U	1.7 U	1.7 U	1.7 U
Hexachloroethane	ug/l	1.2 U	1.2 U	1.2 U	1.2 U
Indeno[1,2,3-cd]pyrene	ug/l	0.036 U	0.036 U	0.036 U	0.036 U
Isophorone	ug/l	0.8 U	0.8 U	0.8 U	0.8 U
Naphthalene	ug/l	1.1 U	1.1 U	1.1 U	1.1 U
Nitrobenzene	ug/l	0.57 U	0.57 U	0.57 U	0.57 U
N-Nitrosodimethylamine	ug/l	0.12 U	0.12 U	0.12 U	0.12 U
N-Nitrosodi-n-propylamine	ug/l	0.43 U	0.43 U	0.43 U	0.43 U
N-Nitrosodiphenylamine	ug/l	0.89 U	0.89 U	0.89 U	0.89 U
Pentachlorophenol	ug/l	0.15 U	0.15 U	0.15 U	0.15 U
Phenanthrene	ug/l	0.58 U	0.58 U	0.58 U	0.58 U
Phenol	ug/l	0.29 U	0.29 U	0.29 U	0.29 U
Pyrene	ug/l	1.6 U	1.6 U	1.6 U	1.6 U

TABLE 11C
SUMMARY OF METALS AND WET CHEMISTRY PARAMETERS IN FIELD BLANKS
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	FB-01-082118FB	FB-03-082318FB	FB-03-082418FB	FB-04-083118
Aluminum	ug/l	18.3 J	15 U	15 U	15 U
Antimony	ug/l	0.62 U	0.62 U	0.62 U	1.9 J
Arsenic	ug/l	0.77 U	0.77 U	0.77 U	0.77 U
Barium	ug/l	1.1 U	1.1 U	1.1 U	1.1 U
Beryllium	ug/l	0.26 U	0.26 U	0.26 U	0.26 U
Cadmium	ug/l	0.61 U	0.61 U	0.61 U	0.61 U
Calcium	ug/l	67.6 U	67.6 U	67.6 U	67.6 U
Chromium	ug/l	1.3 U	1.3 U	1.3 U	1.3 U
Cobalt	ug/l	1.3 U	1.3 U	1.3 U	1.3 U
Copper	ug/l	1.9 U	1.9 U	1.9 U	1.9 U
Cyanide, Total	mg/l	0.002 U	0.002 U	0.002 U	0.002 U
Iron	ug/l	45.7 U	45.7 U	45.7 U	45.7 U
Lead	ug/l	0.37 U	0.37 U	0.37 U	0.37 U
Magnesium	ug/l	65.7 U	65.7 U	65.7 U	65.7 U
Manganese	ug/l	2.7 U	2.7 U	2.7 U	2.7 U
Mercury	ug/l	0.12 U	0.12 U	0.12 U	0.12 U
Nickel	ug/l	1.3 U	1.3 U	1.3 U	1.3 U
Potassium	ug/l	64.9 U	64.9 U	64.9 U	64.9 U
Selenium	ug/l	0.69 U	0.69 U	0.69 U	0.69 U
Silver	ug/l	1.4 U	1.4 U	1.4 U	1.4 U
Sodium	ug/l	2050	75.7 U	75.7 U	75.7 U
Thallium	ug/l	0.24 U	0.24 U	0.24 U	0.24 U
Vanadium	ug/l	1.2 U	1.2 U	1.2 U	1.2 U
Zinc	ug/l	5.4 U	5.4 U	5.4 U	5.4 U
Wet Chemistry					
Alkalinity	mg/l	5 U	5 U	5 U	5 U
Bicarbonate Alkalinity as CaCO3	mg/l	5 U	5 U	5 U	5 U
Chloride	mg/l	0.078 U	0.078 U	0.078 U	0.11 J
Sulfate	mg/l	0.33 U	0.33 U	0.33 U	0.4 J

TABLE 11D
SUMMARY OF PCBs IN FIELD BLANKS
AUGUST 2018
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	FB-01-082118FB	FB-03-082318FB	FB-03-082418FB	FB-04-083118
PCB-1016	ug/l	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1221	ug/l	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1232	ug/l	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1242	ug/l	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1248	ug/l	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1254	ug/l	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1260	ug/l	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1262	ug/l	0.11 U	0.11 U	0.11 U	0.11 U
PCB-1268	ug/l	0.11 U	0.11 U	0.11 U	0.11 U
Polychlorinated biphenyls, Total	ug/l	0.12 U	0.12 U	0.12 U	0.12 U

TABLE 12

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
OB-01	OB-1(110104)	5-31'	11/1/2004	< 1.0		<1	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-1 (123004)		12/30/2004	< 0.31		<1	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-1 (9/26/2006)		9/26/2006	< 0.21		<1	< 1.5 J	< 2.6	1.8 BJ	< 2.6	NA	NA
	OB-1(040607)		4/6/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-1(071009)		10/9/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-1(080430)		4/30/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-1(080908)		9/8/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-1(070209)		7/2/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-1(102209)		10/22/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-1(052610)		5/26/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-1 (052011)		5/20/2011	< 0.26		<1	< 0.92	1.2 B	< 0.92	< 0.94	NA	NA
	OB-1 (042612)		4/26/2012	< 0.22	NA	<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
OB-02	OB-2 (10/13/04)	8-42'	10/13/2004	< 0.50		<2	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-2 (10/2/2006)		10/2/2006	< 0.21		<1	< 1.5	< 2.6	2.0	< 2.6	NA	NA
	OB-2(040607)		4/6/2007	< 0.21		<1	< 1.5	3.2	< 1.5	< 2.8	NA	NA
	OB-2(071008)		10/8/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-2(080428)		4/28/2008	< 0.26		<1	< 1.7	1.8 B	< 1.7	< 1.4	NA	NA
	OB-2 (080917)		9/17/2008	< 0.26		<1	< 1.7	< 1.4	1.7 B	< 1.4	NA	NA
	OB-2(063009)		6/30/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-2(102009)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-2(052510)		5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-2(051611)		5/16/2011	< 0.26		<1	< 0.92	1.3 B	< 0.92	< 1.1	NA	NA
	OB-2 (041912)		4/19/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-2 (111813)		11/18/2013	< 0.28		<1	< 1.5	2.6 B	< 1.5	< 2.4	NA	NA
	OB-2(091514)		9/15/2014	< 0.21		<1	< 2.6	< 1.3	< 3.0 B	< 1.3	NA	NA
	OB-2(081215)		8/12/2015	<0.2	<0.27	<1	1.2 UB	<0.2	<0.5	<0.2	NA	NA
	OB-2(081716)		8/17/2016	< 0.09	< 0.0765	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-2(082217)		8/22/2017	< 0.09	< 0.0815	< 0.37	< 0.64	0.46 J	< 0.64	< 0.38	NA	NA
	OB-2(082318)		8/23/2018	< 0.43	0.25 B	< 0.32	< *0.77*	< 0.37	< *0.77*	< 0.37	NA	NA
OB-03	OB-3 (10/13/04)	9-24'	10/13/2004	< 0.50		<2	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-3		9/28/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-3(040307)		4/3/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-3(071008)		10/8/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-3(080428)		4/28/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-3(080909)		9/9/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-3(063009)		6/30/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-3(102009)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-3(052510)		5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-3(151711)		5/17/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-3(042312)		4/23/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-3(042312) DUP		4/23/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-3 (111513)		11/15/2013	< 0.28 J		<1 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-3(090814)		9/8/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	DUP(090814)		9/8/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-3(081015)		8/10/2015	<0.2	<0.27	<1	<0.5	<0.2	<0.5	<0.2	NA	NA
	OB-3(081616)		8/16/2016	< 0.09	< 0.0735	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-3(082117)		8/21/2017	< 0.09	< 0.0781	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-3(082117) DUP		8/21/2017	< 0.09	< 0.0833	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-3(082218)		8/22/2018	< 0.43	< 0.017	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
OB-04	OB-4 (10/14/04)	28-61'	10/14/2004	< 0.50		<2	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-4		9/29/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-4(040607)		4/6/2007	< 0.21		<1	< 1.5	4.1	< 1.5	< 2.8	NA	NA
	OB-4(071009)		10/9/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-4(080428)		4/28/2008	< 0.26		<1	< 1.7	1.6 B	< 1.7	< 1.4	NA	NA
	OB-4(080910)		9/10/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-4(070109)		7/1/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-4(102109)		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-4(052610)		5/26/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-4(051711)		5/17/2011	< 0.26		<1	1.1 B	1.2 B	< 0.92	< 0.94	NA	NA
	OB-4 (042712)		4/27/2012	< 0.22		<1 J	< 0.97	1.9 J	< 0.97	< 1.7	NA	NA
	OB-4 (111313)		11/13/2013	< 0.28		<1	1.7 B	< 3.9 B	2.2 B	< 3.4 B	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
	OB-4(091514)		9/15/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-4(081015)		8/10/2015	<0.2	<0.27	<1	<0.5	<0.2	<0.5	<0.2	NA	NA
	OB-4(081716)		8/17/2016	< 0.09	0.079 J	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-4(081617)		8/16/2017	< 0.09	0.126 J	< 0.37	0.87 J	< 0.38	< 0.64	< 0.38	NA	NA
	OB-4(082118)		8/21/2018	< 0.43	< 0.016	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
	OB-5 (10/15/04)		10/15/2004	< 0.50		<2	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-5 (10/2/2006)		10/2/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	2.6 B	NA	NA
	OB-5(040407)		4/4/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-5(071009)		10/9/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-5(080428)		4/28/2008	< 0.26		<1	< 1.7	1.5 B	< 1.7	1.4 B	NA	NA
	OB-5(080909)		9/9/2008	< 0.26		<1	< 1.7	1.7 B	< 1.7	< 1.4	NA	NA
	OB-5(070109)		7/1/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-5(102109)		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
OB-05	OB-5(052610)	18-63'	5/26/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-5(051711)		5/17/2011	< 0.26		<1	< 0.92	1.2 B	< 0.92	< 0.94	NA	NA
	OB-5 (041912)		4/19/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-5 (041912) DUP		4/19/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-5(111113)		11/11/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-5(090814)		9/8/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-5(081015)		8/10/2015	<0.2	<0.27	<1	<0.5	<0.2	<0.5	<0.2	NA	NA
	OB-5(081816)		8/18/2016	< 0.09	0.165	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-5(082117)		8/21/2017	< 0.09	0.194	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-5(082318)		8/23/2018	< 0.43	0.32 B	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
	OB-6 (11/2/04)		11/2/2004	< 0.31		<1	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-6 (123004)		12/30/2004	< 0.31		<1	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-6		9/26/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-6(040607)		4/6/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-6(071009)		10/9/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-6(080501)		5/1/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	1.9 B	NA	NA
	OB-6(080908)		9/8/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
OB-06	OB-6(070209)	10-36'	7/2/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-6 (111513)		11/15/2013	< 0.28 J		<1 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-6(090814)		9/8/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-6(080615)		8/6/2015	<0.2	<0.27	<1	<0.7 B	<0.2	<0.2 B	<0.2	NA	NA
	OB-6(081816)		8/18/2016	< 0.09	< 0.0735	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-6(081617)		8/16/2017	< 0.09	< 0.0708	< 0.37	< 0.64	0.38 J	< 0.64	< 0.38	NA	NA
	OB-6(082118)		8/21/2018	< 0.43	< 0.017	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
	OB-7 (101304)		10/13/2004	< 0.50		<2	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	REP101304		10/13/2004	< 0.50		<2	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-7		9/28/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB7(041107)		4/11/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-7(071009)		10/9/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-7(080430)		4/30/2008	< 0.26		<1	< 1.7	2.9 B	2.0 B	1.9 B	NA	NA
	OB-7(080910)		9/10/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-7(080910) DUP		9/10/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-7(070109)		7/1/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-7(102109)		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
OB-07	OB-7(052510)	14-42'	5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-7(052510) DUP		5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-7(051711)		5/17/2011	< 0.26		<1	< 0.92	1.2 B	< 0.92	1.3 B	NA	NA
	OB-7 (041912)		4/19/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	DUP (111213)		11/12/2013	< 0.28		<1	< 3.0 B	< 2.4	< 3.0 B	< 2.4	NA	NA
	OB-7 (111213)		11/12/2013	< 0.28		<1	< 3.0 B	< 2.4	< 3.0 B	< 2.4	NA	NA
	OB-7 (090514)		9/5/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	DUP (090514)		9/5/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-7(082415)		8/24/2015	<0.2	<0.27	<1	<0.57 J	<0.2	<0.5	<0.2	NA	NA
	OB-7(081816)		8/18/2016	< 0.09	0.146 J	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-17(081617)		8/16/2017	< 0.09	0.15	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-17(082118)		8/21/2018	< 0.43	< 0.016	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
	OB-10 (10/14/04)		10/14/2004	< 0.50		<2	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	OB-10 (10/2/2006)		10/2/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
OB-10	OB-10 (040207)	10-20'	4/2/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-10 (071012)		10/12/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-10(080429)		4/29/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-10(080910)		9/10/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-10(070109)		7/1/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-10(102109)		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-10(102109) DUP		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-10(052610)		5/26/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-10(051711)		5/17/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-10(051711) DUP		5/17/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-10 (042012)		4/20/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-10 (111413)		11/14/2013	< 0.28 J		<1 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-10(090914)		9/9/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	DUP(090914)		9/9/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-10(081415)		8/14/2015	<0.2	<0.27	<1	<1.3 B	<0.2	<0.5	<0.2	NA	NA
	OB-10(081616)		8/16/2016	< 0.09	0.172	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-10(081817)		8/18/2017	< 0.09	0.155	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-10(022818)		8/22/2018	< 0.43	< 0.016	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
OB-11	OB-11(10/14/04)	25-40'	10/14/2004	1.2		2.6	*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
OB-11R	OB-11R(061110)	25-40'	6/11/2010	5.2		39.1	24.9	< 1.9	3.8	< 1.9	NA	NA
	OB-11R(051811)		5/18/2011	3.7		20.2	23.9	7.4	19.5	2.4 B	NA	NA
	OB-11R (042612)		4/26/2012	3.7		37.9 J	21.0	4.5	7.5 J	3.7 J	NA	NA
	OB-11R (110813)		11/8/2013	4.7		30.2	25.3	< 2.4	7.3	< 2.4	NA	NA
	OB-11R (091114)		9/11/2014	3.5		21.2	26.6	< 1.3	6.1	< 1.3	31.2	0.4 J
	DUP (091114)		9/11/2014	NA		NA	NA	NA	NA	NA	31	< 0.2
	OB-11R (032015)		3/20/2015	3.2		24.3	NA	NA	NA	NA	NA	NA
	OB-11R (042115)		4/21/2015	2.9		21.2	NA	NA	NA	NA	NA	NA
	OB-11R (060115)		6/1/2015	2.9		22	NA	NA	NA	NA	NA	NA
	OB-11R (080615)		8/6/2015	2.9	4.3J	23	25 B	<0.2	<0.89 B	<0.2	NA	NA
	OB-11R (121515)		12/15/2015	3.1	1.3	30	NA	NA	NA	NA	NA	NA
	OB-11R (052516)[2]		5/25/2016	2.4/2.8	1.8/5.41	19/22	NA	NA	NA	NA	NA	NA
	DUP2 (052516)		5/25/2016	2.5	1.6	20	NA	NA	NA	NA	NA	NA
	OB-11R (081716)		8/17/2016	3.2	5.97	24	23.8	< 0.44	< 0.71	< 0.44	NA	NA
	OB-11R (020317)		2/3/2017	2.2	3.57	17	24.4	< 0.38	< 0.64	< 0.38	NA	NA
	OB-11R (081717)		8/17/2017	2.5	6.11	17	27.3	0.4 J	< 0.64	< 0.38	NA	NA
	OB-11R (082218)		8/22/2018	2	3.7	27	25.8	< 0.37	< 0.77	< 0.37	NA	NA
OB-12	OB-12 (1101/04)	9-40'	11/1/2004	< 1.0		<1	*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	OB-12 (123004)		12/30/2004	< 0.31		<1	*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	OB-12		9/28/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-12(040307)		4/3/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-12(071008)		10/8/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-12(080428)		4/28/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-12(080909)		9/9/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-12(063009)		6/30/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-12(063009)DUP		6/30/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-12(102009)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-12(052510)		5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-12(051711)		5/17/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-12 (041912)		4/19/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-12 (111813)		11/18/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-12(091514)		9/15/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-12(081015)		8/10/2015	<0.2	<0.27	<1	<0.5	<0.2	<0.5	<0.2	NA	NA
	OB-12(081716)		8/17/2016	< 0.09	< 0.0735	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-12(082217)		8/22/2017	< 0.09	< 0.0815	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-12(082318)		8/23/2018	< 0.43	0.28 B	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
	OB-12(082318) DUP		8/23/2018	< 0.43	0.25 B	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
	OB-13 (10/13/04)		10/13/2004	< 0.50		<2	*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	OB-13		10/3/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-13(040307)		4/3/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-13(071008)		10/8/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-13(080428)		4/28/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
OB-13	OB-13(080910)	8-60'	9/10/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-13(070109)		7/1/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-13(102109)		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-13(052510)		5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-13(051711)		5/17/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-13 (042012)		4/20/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-13 (111313)		11/13/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-13(090814)		9/8/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-13(081015)		8/10/2015	<0.2	<0.27	<1	<0.5	<0.2	<0.5	<0.2	NA	NA
	OB-13(081616)		8/16/2016	< 0.09	< 0.075	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-13(081717)		8/17/2017	< 0.09	< 0.0758	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-13(082218)		8/22/2018	< 0.43	< 0.016	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
OB-14A	OB-14A (10/12/04)	4-14'	10/12/2004	< 0.50		<2	16.7	< 3.0	19.6	< 3.0	NA	NA
	OB-14A		9/27/2006	< 0.21		<1	4.5 J	< 2.6	5.5 J	< 2.6	NA	NA
	OB-14A(040907)		4/9/2007	< 0.21		<1	2.4	3.3	< 1.5	2.9 B	NA	NA
	OB-14A (071011)		10/11/2007	< 0.19		<1	23.1	1.4 B	5.6	< 0.94	NA	NA
	DUP (071011)		10/11/2007	< 0.19		<1	21.6	1 B	5	1.2 B	NA	NA
	OB-14A(080430)		4/30/2008	< 0.26		<1	14.4	4.0	3.8	2.7 B	NA	NA
	OB-14A(080911)		9/11/2008	< 0.26		<1	2.3 BJ	< 1.4	< 1.7	< 1.4	NA	NA
	OB-14A(070609)		7/6/2009	< 0.23		<1	< 3.0	< 1.7	< 3.0	< 1.7	NA	NA
	OB-14A(102309)		10/23/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-14A(052810)		5/28/2010	< 0.23		<1	1.8 B	< 1.9	< 1.4	< 1.9	NA	NA
	OB-14A(051911)		5/19/2011	< 0.26		<1	< 0.92	3.8 J	< 0.92	< 3.0	NA	NA
	OB-14A(041812)		4/18/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-14A (110613)		11/6/2013	< 0.28		<1	2.8 B	< 3.6 B	< 1.5	< 2.4	NA	NA
	OB-14A(090314)		9/3/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-14A(091114)		9/11/2014	< 0.21		<1	4.8	< 1.3	3.5	< 1.3	5.2	0.5 J
	OB-14A(081315)		8/13/2015	<0.0.2	<0.27	<1	9.2	0.86 J	1.1 J	<0.2	NA	NA
	OB-14A(052316)[2]		5/23/2016	<1/<0.09	<0.42/0.087J	<1/<0.13	NA	NA	NA	NA	NA	NA
	OB-14A(081616)		8/16/2016	< 0.09	< 0.0833	< 0.37	1 J	0.56 J	< 0.71	< 0.44	NA	NA
	OB-14A(082417)		8/24/2017	< 0.09	< 0.0781	< 0.37	3.5	< 0.38	< 0.64	< 0.38	NA	NA
	OB-14A(082417) DUP		8/24/2017	< 0.09	< 0.0781	< 0.37	3	0.9 J	< 0.64	< 0.38	NA	NA
	OB-14A(082118)		8/21/2018	< 0.43	< 0.016	< 0.32	< 0.77	3.1	< 0.77	< 0.37	NA	NA
	OB-14A(082118) DUP		8/24/2017	< 0.09	< 0.0781	< 0.37	3	0.9 J	< 0.64	< 0.38	NA	NA
OB-14B	OB-14B (10/12/04)	25-35'	10/12/2004	< 0.50		<2	*< 5.0*	3.6	*< 5.0*	< 3.0	NA	NA
	OB-14B		9/27/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-14B(040907)		4/9/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-14B (071011)		10/11/2007	< 0.19		<1	2.8 B	1.1 B	1.6 B	< 0.94	NA	NA
	OB-14B(080430)		4/30/2008	< 0.26		<1	2.1 B	3.2	< 1.7	2.1 B	NA	NA
	OB-14B(080911)		9/11/2008	< 0.26		<1	2 BJ	< 1.4	2.6 BJ	< 1.4	NA	NA
	OB-14B(070609)		7/6/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-14B(102309)		10/23/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-14B(052810)		5/28/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-14B(051911)		5/19/2011	< 0.26		<1	1.6 J	4.8 J	< 0.92	< 3.0	NA	NA
	OB-14B(041812)		4/18/2012	< 0.22		<1	< 3	< 1.7	< 0.97	< 1.7	NA	NA
	OB-14B (110613)		11/6/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-14B(091114)		9/11/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-14B(081315)		8/13/2015	<0.2	<0.27	<1	2.5	<0.2	1.1 J	<0.2	NA	NA
	OB-14B(052316)[2]		5/23/2016	<1/<0.09	0.18 J/0.32	<1/<0.13	NA	NA	NA	NA	NA	NA
	OB-14B(081616)		8/16/2016	< 0.09	0.28	< 0.37	0.79 J	< 0.44	0.89 J	< 0.44	NA	NA
	OB-14B(020217)		2/2/2017	< 0.09	0.314	< 0.37	1.2 J	< 0.38	1 J	< 0.38	NA	NA
	OB-14B(082417)		8/24/2017	< 0.09	0.284	< 0.37	0.92 J	< 0.38	0.72 J	< 0.38	NA	NA
	OB-14B(082118)		8/21/2018	< 0.43	0.33	< 0.32	1.2 J	< 0.37	0.8 J	< 0.37	NA	NA
	OB-15B (10/12/04)		10/12/2004	< 0.50		<2	*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	OB-15B		10/3/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-15B(041207)		4/12/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-15B(071016)		10/16/2007	< 0.19		<1	< 1.1	1.0 B	< 1.1	< 0.94	NA	NA
	OB-15B(080502)		5/2/2008	< 0.26		<1	< 1.7	2.6 B	< 1.7	2.1 B	NA	NA
	OB-15B(080916)		9/16/2008	< 0.26		<1	1.7 B	< 1.4	< 1.7	< 1.4	NA	NA
	OB-15B(070609)		7/6/2009	< 0.23		<1	< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
	OB-15B(102609)		10/26/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
OB-15B	OB-15B(061110)	25-35'	6/11/2010	< 0.23		<1	3.2	2.0 B	< 1.4	< 1.9	NA	NA
	OB-15B(052311)		5/23/2011	< 0.22		<1	1.2 B	2.0 B	< 0.92	< 0.94	NA	NA
	OB-15B(042412)		4/24/2012	< 0.22		<1	1.5 B	< 1.7	1.4 B	< 1.7	NA	NA
	OB-15B (112013)		11/20/2013	< 0.28 J		<1 J	2.9 B	< 2.4	< 1.5	< 2.4	NA	NA
	OB-15B (090514)		9/5/2014	< 0.21		<1	< 2.6	1.4 B	< 2.6	< 1.3	NA	NA
	OB-15B (082415)		8/24/2015	<0.2	<0.27	<1	1.4 J	<0.63 B	1.1 J	<0.2	NA	NA
	OB-15B (081716)		8/17/2016	< 0.09	< 0.0781	< 0.37	< 0.71	< 0.44	0.78 J	< 0.44	NA	NA
	OB-15B (081617)		8/16/2017	< 0.09	< 0.0765	< 0.37	1.1 J	< 0.38	0.81 J	< 0.38	NA	NA
	OB-15B (082218)		8/22/2018	< 0.43	< 0.016	< 0.32	0.98 J	< 0.37	0.82 J	< 0.37	NA	NA
OB-16	OB-16 (10/12/04)	5-15'	10/12/2004	< 0.50		<2	7.6	< 3.0	6.3	< 3.0	NA	NA
	OB-16 (9/27/2006)		9/27/2006	< 0.21		<1	6.2	< 2.6	4.2	< 2.6	NA	NA
	OB-16(041007)		4/10/2007	< 0.21		<1	4.4	< 2.8	3.3	< 2.8	NA	NA
	OB-16(071010)		10/10/2007	< 0.19		<1	8.8	< 0.94	3.6	< 0.94	NA	NA
	OB-16(080501)		5/1/2008	< 0.26		<1	4.6	3.7	< 1.7	1.6 B	NA	NA
	OB-16(080911)		9/11/2008	< 0.26		<1	7.4	< 1.4	2.6 BJ	< 1.4	NA	NA
	OB-16(070809)		7/8/2009	< 0.23		<1	5.1	< 1.7	< 2.4	< 1.7	NA	NA
	OB-16(102309)		10/23/2009	NA		NA	6.1	< 1.7	< 2.4	< 1.7	NA	NA
	OB-16		10/29/2009	< 0.23		<1	NA	NA	NA	NA	NA	NA
	OB-16(052710)		5/27/2010	< 0.23		<1	7.8	< 1.9	< 1.4	< 1.9	NA	NA
	OB-16(051911)		5/19/2011	< 0.26		<1	9.1	< 3.0	6.0	< 3.0	NA	NA
	OB-16(041712)		4/17/2012	< 0.22		<1	6.9 J	< 1.7	< 3	1.8 B	NA	NA
	OB-16 (110613)		11/6/2013	< 0.28		<1	9.9	< 2.4	6.4	< 2.4	NA	NA
	OB-16 (091014)		9/10/2014	< 0.21		<1	4.7	1.3 B	< 2.6	1.8 B	12.7	0.8 J
	OB-16 (081315)		8/13/2015	<0.2	<0.27	<1	12	<0.2	2.3	<0.2	NA	NA
	OB-16 (052316)[2]		5/23/2016	<1/<0.09	<0.42/<0.0735	<1/<0.13	NA	NA	NA	NA	NA	NA
	OB-16 (081616)		8/16/2016	< 0.09	< 0.0781	< 0.37	7.9	< 0.44	< 0.71	< 0.44	NA	NA
	OB-16 (020317)		2/3/2017	< 0.09	< 0.0735	< 0.37	6.9	< 0.38	0.7 J	< 0.38	NA	NA
	OB-16 (082417)		8/24/2017	< 0.09	< 0.0735	< 0.37	9.3	< 0.38	1.2 J	< 0.38	NA	NA
	OB-16 (082118)		8/21/2018	< 0.43	< 0.016	< 0.32	8.9	< 0.37	2.1	< 0.37	NA	NA
OB-17	OB-17(10/11/04)	3-13'	10/11/2004	< 0.50		<2	*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	OB-17		9/27/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-17(041007)		4/10/2007	< 0.21		<1	< 1.5	3.5	< 1.5	< 2.8	NA	NA
	OB-17(071010)		10/10/2007	< 0.19		<1	2.5 B	1.7 B	< 1.1	< 0.94	NA	NA
	OB-17(080501)		5/1/2008	< 0.26		<1	< 1.7	2.3 B	< 1.7	2.4 B	NA	NA
	OB-17(080911)		9/11/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-17(070809)		7/8/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-17(102309)		10/23/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-17(052710)		5/27/2010	< 0.23		<1	1.9 B	< 1.9	< 1.4	< 1.9	NA	NA
	OB-17(051911)		5/19/2011	< 0.26		<1	< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
	OB-17(041712)		4/17/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-17 (110613)		11/6/2013	< 0.28		<1	1.9 B	< 2.4	< 1.5	< 2.4	NA	NA
	OB-17(090314)		9/3/2014	< 0.21		<1	3.5	< 1.3	< 2.6	< 1.3	NA	NA
	OB-17(081315)		8/13/2015	<0.2	17	<1	5.0 B	0.36 J	0.58 J	<0.2	NA	NA
	OB-17(052416)[2]		5/24/2016	<1/<0.09	2.9/18.9	<1/<0.13	NA	NA	NA	NA	NA	NA
	OB-17(081616)		8/16/2016	< 0.09	17.5	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-17(020217)		2/2/2017	< 0.09	16/13	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-17(082417)		8/24/2017	< 0.09	20.7	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-17(082118)		8/21/2018	< 0.43	11	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
OB-18	OB-18 (10/14/04)	10-20'	10/11/2004	< 0.50		<2	*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	OB-18		9/26/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-18(041007)		4/10/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	DUP(041007) (OB-18)		4/10/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-18(071010)		10/10/2007	< 0.19		<1	< 1.1	1.2 B	< 1.1	1.0 B	NA	NA
	OB-18(080501)		5/1/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	1.8 B	NA	NA
	OB-18(080911)		9/11/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-18(070809)		7/8/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-18(102309)		10/23/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-18(052710)		5/27/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-18(051911)		5/19/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 1.1	NA	NA
	OB-18(041712)		4/17/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-18 (110613)		11/6/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
	OB-18(09032014)		9/3/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-18(081315)		8/13/2015	<0.2	<0.27	<1	1.4 J	<0.2	<0.5	<0.2	NA	NA
	OB-18(052316)[2]		5/23/2016	<1/<0.09	<0.42/<0.0735	<1/<0.13	1.4 J	<0.2	<0.5	<0.2	NA	NA
	OB-18(081616)		8/16/2016	< 0.09	< 0.0798	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-18(082417)		8/24/2017	< 0.09	< 0.0798	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-18(082118)		8/21/2018	< 0.43	< 0.016	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
	OB-18(082118) DUP		8/21/2018	< 0.43	< 0.016	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
	MW-19		10/3/2006	0.55 J		3.1	3.1	9.4	< 1.5	< 2.6	NA	NA
	OB-19(040907)		4/9/2007	0.59 J		1.5	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-19(071015)		10/15/2007	< 0.19		<1	1.9 B	1.3 B	< 1.1	1.1 B	NA	NA
	DUP(071015)		10/15/2007	< 0.19		<1	1.8 B	1.0 B	< 1.1	< 0.94	NA	NA
	OB-19(080429)		4/29/2008	0.56 J		1.5	< 1.7	1.4 B	< 1.7	< 1.4	NA	NA
	OB-19(080912)		9/12/2008	0.37 J		4.3	4 J	< 1.4	< 1.7	< 1.4	NA	NA
	OB-19(070709)		7/7/2009	1.2		6.2	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-19(102709)		10/27/2009	0.39 J		1.4 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-19(060110)		6/1/2010	0.29 J		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
OB-19	OB-19 (052011)	5-20'	5/20/2011	0.90 J		2.8	< 0.92	3.5	< 0.92	1.0 B	NA	NA
	OB-19 (042512)		4/25/2012	0.32 J		2.3	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-19(111113)		11/11/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-19 (090414)		9/4/2014	< 0.21		<1	6.0	< 1.3	< 2.6	< 1.3	NA	NA
	OB-19(080515)		8/5/2015	<0.2	<0.27	<1	<1.6 B	<0.44 J	<0.87 B	<0.2	NA	NA
	OB-19 (121515)		12/15/2015	1.4	1.89	8.7	NA	NA	NA	NA	NA	NA
	OB-19 (052516)[2]		5/23/2016	1.3/1.5	1.3/4.77	6.8/7.9	NA	NA	NA	NA	NA	NA
	OB-19 (081716)		8/17/2016	0.23 J	0.878	1.5	0.9 J	0.47 J	< 0.71	< 0.44	NA	NA
	OB-19 (020317)		2/3/2017	0.89 J	3.14	4	< 0.64	0.4 J	< 0.64	< 0.38	NA	NA
	OB-19 (082517)		8/25/2017	< 0.09	0.184	< 0.37	1.6 J	1.3	< 0.64	< 0.38	NA	NA
	OB-19 (082218)		8/22/2018	< 0.43	0.97	1.2	0.82 J	1.8	< 0.77	< 0.37	NA	NA
	MW-20		10/4/2006	0.36 J		<1	13.9	< 2.6	13.1	< 2.6	NA	NA
	OB-20A(040307)		4/3/2007	0.48 J		<1	24.6	< 2.8	20.8	< 2.8	NA	NA
	OB-20A (071011)		10/11/2007	0.36 J		<1	18.6	3	2.4 B	< 0.94	NA	NA
	OB-20A(080429)		4/29/2008	< 0.26		<1	3.7	2.1 B	< 1.7	1.8 B	NA	NA
	OB-20A(080915)		9/15/2008	< 0.26		<1	7.8	< 1.4	5.3	< 1.4	NA	NA
	OB-20A(070909)		7/9/2009	< 0.23		<1	< 3.0	< 1.7	< 3.0	< 1.7	NA	NA
	OB-20A(102809)		10/28/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-20A(060210)		6/2/2010	< 0.23		<1	7.9	1.9 B	< 1.4	< 1.9	NA	NA
	OB-20A(051811)		5/18/2011	< 0.22		<1	< 0.92	5.6	< 0.92	1.0 J	NA	NA
	OB-20A(051811) DUP		5/18/2011	< 0.22		<1	< 0.92	2.8 B	< 0.92	< 0.94	NA	NA
	OB-20A (042712)		4/27/2012	< 0.22		<1	< 3.0	3.0 J	< 3.0	< 1.7	NA	NA
OB-20A	OB-20A (110813)	5-20'	11/8/2013	< 0.28		<1	7.2	11.2 J	3.4	< 2.4	NA	NA
	DUP (110813)		11/8/2013	< 0.28		<1	5.7	< 2.4 J	2.2 B	< 2.4	NA	NA
	OB-20A (090514)		9/5/2014	< 0.21		<1	7.7	< 1.3	3.9	< 1.3	NA	NA
	OB-20A (031915)		3/19/2015	<0.21		<1	NA	NA	NA	NA	NA	NA
	OB-20A (042115)		4/21/2015	<0.24		<.5	NA	NA	NA	NA	NA	NA
	OB-20A (060115)		6/1/2015	<0.20		<1	NA	NA	NA	NA	NA	NA
	OB-20A (080515)		8/5/2015	<0.2	<0.27	<1	7.1	<0.44 J	2.0 B	<0.2	NA	NA
	OB-20A (121415)		12/14/2015	<0.09	<0.053	<1	NA	NA	NA	NA	NA	NA
	OB-20A (052616)[2]		5/26/2016	<1/<0.09	<0.42/0.175	<1/<0.13	NA	NA	NA	NA	NA	NA
	OB-20A (081816)		8/18/2016	< 0.09	0.147 J	< 0.37	2.3	0.59 J	< 0.71	< 0.44	NA	NA
	OB-20A (082917)		8/29/2017	< 0.09	0.206	< 0.37	5	0.69 J	< 0.64	< 0.38	NA	NA
	OB-20A (082318)		8/23/2018	< 0.43	0.28 B	< 0.32	0.77 J	0.41 UB	< 0.77	< 0.37	NA	NA
	MW-20 OB-34		10/4/2006	2.0		4.5	1.5 B	3.1	< 1.5	< 2.6	NA	NA
	REP100406		10/4/2006	1.9		3.8	1.9 B	3.5	1.6 B	< 2.6	NA	NA
	OB20B(040507)		4/5/2007	1.4		1.8	1.5 B	< 2.8	< 1.5	2.9 B	NA	NA
	DUP(040507) (OB20B)(040507)		4/5/2007	1.5		1.8	< 1.5	< 2.8	< 1.5	3.6	NA	NA
	OB-20B (071011)		10/11/2007	1.5		2.8	1.2 B	1.1 B	< 1.1	1 B	NA	NA
	OB-20B(080429)		4/29/2008	1.4		2.1	< 1.7	3.8	< 1.7	2.4 B	NA	NA
	OB-20B(080915)		9/15/2008	0.90 J		1.9	3.8	< 1.4	< 1.7	< 1.4	NA	NA
	OB-20B(070909)		7/9/2009	0.83 J		1.6	< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
	OB-20B(102809)		10/28/2009	0.77 J		1.2	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-20B(060210)		6/2/2010	1.1		1.3	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-20B(051811)		5/18/2011	0.86 J		1.5	< 0.92	2.5 B	< 0.92	2.2 B	NA	NA

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Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
OB-20B	OB-20B (042712)	24-34'	4/27/2012	0.66 J		1.6 J	< 0.97	2.8 J	< 0.97	< 1.7	NA	NA
	OB-20B (110813)		11/8/2013	0.52 J		1.5	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-20B (090514)		9/5/2014	0.37 J		1.1	2.7 B	< 1.3	2.9 B	< 1.3	NA	NA
	OB-20B(100914)		10/9/2014	0.40 J		1.6	3.9	< 1.3	3.1	< 1.3	NA	NA
	OB-20B(100914)		10/9/2014	0.40 J		1.5	3.4	< 1.3	3.7	< 1.3	NA	NA
	OB-20B(031915		3/19/2015	0.46J		3.6	NA	NA	NA	NA	NA	NA
	OB-20B(042115)		4/21/2015	0.36J		2.4	NA	NA	NA	NA	NA	NA
	OB-20B(060115)		6/1/2015	0.27J		1.7	NA	NA	NA	NA	NA	NA
	OB-20B(080515)		8/5/2015	0.27 J	0.95J	1.8	1.5 J	0.28 J	<1.1 B	<0.2	NA	NA
	OB-20B(121415)		12/14/2015	0.5J	1.25	4.4	NA	NA	NA	NA	NA	NA
	DUP(121415)		12/14/2015	0.51J	1.37	6.7	NA	NA	NA	NA	NA	NA
	OB-20B(052416)[2]		5/25/2016	0.28J/0.29J	1.0/2.0	2.6/2.5	NA	NA	NA	NA	NA	NA
	OB-20B(081816)		8/18/2016	0.15 J	1.26	3.9	1.6 J	< 0.44	< 0.71	< 0.44	NA	NA
	OB-20B(020317)		2/3/2017	0.35 J	3.08	< 0.37	1.5 J	0.74 J	< 0.64	< 0.38	NA	NA
	OB-20B(082917)		8/29/2017	0.13 J	1.05	1.6	1.3 J	0.45 J	< 0.64	< 0.38	NA	NA
	OB-20B(082917) DUP		8/29/2017	0.13 J	1.05	< 0.37	1.5 J	0.47 J	< 0.64	< 0.38	NA	NA
	OB-20B(082318)		8/23/2018	< 0.43	0.59 B	1.1	1.1 J	0.43 UB	< 0.77	< 0.37	NA	NA
OB-21	MW-21	6-21'	10/5/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	REP100506		10/5/2006	< 0.21		NA	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-21(040907)		4/9/2007	< 0.21		<1	10.4	29.2	< 1.5	< 2.8	NA	NA
	OB-21(071015)		10/15/2007	< 0.19		<1	9.0 B	27.0	< 1.1	< 0.94	NA	NA
	OB-21(080429)		4/29/2008	< 0.26		<1	< 1.7	2.1 B	< 1.7	< 1.4	NA	NA
	OB-21(080912)		9/12/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-21(070709)		7/7/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-21(070709) DUP		7/7/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-21(102709)		10/27/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-21(060110)		6/1/2010	< 0.23		<1	< 1.4	2.5 B	< 1.4	< 1.9	NA	NA
	OB-21(051811)		5/18/2011	< 0.22		<1	< 0.92	2.8 B	< 0.92	< 0.94	NA	NA
	OB-21(042412)		4/24/2012	< 0.22		<1	< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
	OB-21 (110713)		11/7/2013	< 0.28 J		<1 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-21 (090414)		9/4/2014	< 0.21		<1	2.9 B	< 1.3	< 2.6	< 1.3	NA	NA
	DUP (090414)		9/4/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-21(042015)		4/20/2015	<0.24		<.5	NA	NA	NA	NA	NA	NA
	OB-21(080615)		8/16/2015	<0.2	<0.27	<1	<1.4 B	1.8 J	<0.56 B	0.24 J	NA	NA
	OB-21(081816)		8/18/2016	< 0.09	< 0.0781	< 0.37	< 0.71	1.5	< 0.71	< 0.44	NA	NA
	OB-21(083017)		8/30/2017	< 0.09	< 0.0798	< 0.37	1.5 J	4.2	< 0.64	< 0.38	NA	NA
	OB-21(082218)		8/22/2018	< 0.43	< 0.016	< 0.32	< 0.77	0.7 J	< 0.77	< 0.37	NA	NA
OB-22	OB-22	10-20'	11/30/2006	< 0.21		<1	9.5	19.5	< 1.5	< 2.8	NA	NA
	OB-22(040407)		4/4/2007	< 0.21		<1	5.2	9.1	< 1.5	< 2.8	NA	NA
	OB-22(080501)		5/1/2008	< 0.26		<1	< 1.7	2.3 B	< 1.7	< 1.4	NA	NA
	OB-22(070809)		7/8/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-22(052810)		5/28/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-22(051911)		5/19/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 1.1	NA	NA
	OB-22 (041912)		4/19/2012	< 0.22	NA	<1	NA	NA	NA	NA	NA	NA
	OB-22 (020217)		2/2/2017	< 0.09	< 0.0758	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-22 (082118)		8/21/2018	< 0.43	< 0.016	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
OB-23	OB-23	10-20'	11/28/2006	< 0.21		<1	1.8 B	< 2.8 J	< 1.5	3.0 J	NA	NA
	OB-23(041107)		4/11/2007	< 0.21		<1	< 1.5	24.1	< 1.5	< 2.8	NA	NA
	OB-23(080502)		5/2/2008	< 0.26		<1	< 1.7	2.5 B	< 1.7	< 1.4	NA	NA
	OB-23(070809)		7/8/2009	< 0.23		<1	< 2.4	7.5	< 2.4	< 1.7	NA	NA
	OB-23(052810)		5/28/2010	< 0.23		<1	2.2 B	2.2 B	< 1.4	< 1.9	NA	NA
	OB-23(051911)		5/19/2011	< 0.26		<1	< 0.92	5.5 J	< 0.92	< 3.0	NA	NA
	OB-23(082118)		8/21/2018	< 0.43	< 0.017	< 0.32	< 0.77	1.1 J	< 0.77	< 0.37	NA	NA
	OB-24		11/28/2006	< 0.21		<1	< 1.5	2.8 B	< 1.5	< 2.8	NA	NA
	OB-24(041107)		4/11/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-24(071012)		10/12/2007	< 0.19		<1	1.9 B	1.2 BJ	< 1.1	1.5 BJ	NA	NA
	OB-24(080430)		4/30/2008	< 0.26		<1	1.7 B	1.5 B	< 1.7	< 1.4	NA	NA
	DUP-02(080430) (OB-24)		4/30/2008	< 0.26		<1	< 1.7	1.6 B	1.7 B	< 1.4	NA	NA
	OB-24(080911)		9/11/2008	< 0.26		<1	2.5 BJ	< 1.4	< 1.7	< 1.4	NA	NA
	OB-24(070809)		7/8/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-24(102609)		10/26/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
OB-24	OB-24(052810)	5-15'	5/28/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-24(051911)		5/19/2011	< 0.26		<1	< 0.92	4.2 J	< 0.92	< 3.0	NA	NA
	OB-24(041812)		4/18/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-24 (110613)		11/6/2013	< 0.28		<1	< 1.5	< 3.0 B	< 1.5	< 2.4	NA	NA
	DUP (110613)		11/6/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-24(090314)		9/3/2014	0.50		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-24(081315)		8/13/2015	<0.2	<0.27	<1	1.8 J	0.24 J	0.64 J	<0.2	NA	NA
	OB-24(052416)[2]		5/24/2016	<1/<0.09	<0.40/<0.0735	<1/<0.13	NA	NA	NA	NA	NA	NA
	OB-24(081616)		8/16/2016	< 0.09	< 0.075	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-24(081717)		8/17/2017	< 0.09	< 0.0742	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-24(081717) DUP		8/17/2017	< 0.09	< 0.075	< 0.37	0.94 J	0.87 J	< 0.64	< 0.38	NA	NA
	OB-24(082218)		8/22/2018	< 0.43	< 0.016	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
OB-25	OB-25	10-20'	11/30/2006	< 0.21		<1	9.1 J	31.5 J	< 1.5	< 2.8	NA	NA
	REP-061130		11/30/2006	< 0.21		<1	23.1 J	59.3 J	< 1.5	< 2.8	NA	NA
	OB-25(041207)		4/12/2007	< 0.21		<1	7.1	594	< 1.5	< 2.8	NA	NA
	OB-25(071012)		10/12/2007	< 0.19		<1	1.1 B	3.1	< 1.1	1.5 B	NA	NA
	OB-25(080429)		4/29/2008	< 0.26		<1	2.1 B	13.8	< 1.7	< 1.4	NA	NA
	OB-25(080918)		9/18/2008	< 0.26		<1	19.8	45.7	< 1.7	< 1.4	NA	NA
	OB-25(070609)		7/6/2009	< 0.23		<1	8.4 J	19.9	< 2.4	< 1.7	NA	NA
	OB-25(102609)		10/26/2009	< 0.23		<1	< 2.4	4.3	< 2.4	2.0 B	NA	NA
	OB-25(060110)		6/1/2010	< 0.23		<1	1.7 B	53.6	< 1.4	< 1.9	NA	NA
	OB-25 (052011)		5/20/2011	< 0.26		<1	< 0.92	4.2	< 0.92	< 0.94	NA	NA
	OB-25 (042012)		4/20/2012	< 0.22		<1	2.1 J	17.2	< 0.97	< 1.7	NA	NA
	OB-25 (111213)		11/12/2013	< 0.28		<1	9.6 J	40.3	NA	NA	NA	NA
	OB-25 (090914)		9/9/2014	< 0.21		<1	< 2.6	3.8	< 2.6	2.2 B	NA	NA
	OB-25(081215)		8/25/2015	<0.2	<0.27	<1	4.1 B	11	1.0 J	1.0 J	NA	NA
	OB-25(081816)		8/18/2016	< 0.09	0.178	< 0.37	0.97 J	6.8	< 0.71	< 0.44	NA	NA
	OB-25(020617)		2/6/2017	< 0.09	< 0.0765	< 0.37	0.79 J	3.4	< 0.64	< 0.38	NA	NA
	OB-25(081817)		8/18/2017	< 0.09	0.309	< 0.37	0.7 J	1.3	< 0.64	< 0.38	NA	NA
	OB-25(082118)		8/21/2018	< 0.43	< 0.016	< 0.32	1.1 J	1.8	< 0.77	< 0.37	NA	NA
OB-26	OB-26(080509)	9-24'	5/9/2008	< 0.26		<1	< 1.7 B	1.7 B	< 1.7 B	1.5 B	NA	NA
	OB-26(080916)		9/16/2008	< 0.26		<1	2.7 B	< 1.4	< 1.7	< 1.4	NA	NA
	OB-26(070209)		7/2/2009	< 0.23		<1	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	OB-26(102209)		10/22/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-26(052610)		5/26/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-26(051711)		5/17/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-26 (042012)		4/20/2012	< 0.22		<1	< 0.97	5.0 J	< 0.97	< 1.7	NA	NA
OB-27	OB-27(060110)	24.5-39.5'	6/1/2010	5.9		159	20.5	< 1.9	2.9 B	< 1.9	NA	NA
	OB-27(051811)		5/18/2011	6.5		176	NA	NA	NA	NA	NA	NA
	OB-27 (042512)		4/25/2012	5.5		208	21.5	< 1.7	18.0	< 1.7	NA	NA
	OB-27(111113)		11/11/2013	3.5		80.8	25.5	< 2.4	5.6	< 2.4	NA	NA
	DUP(111113)		11/11/2013	3.5		82.1	24.5	< 2.4	9.5	< 2.4	NA	NA
	OB-27 (091014)		9/10/2014	2.6		89.4	23.0	1.4 B	4.5	< 1.3	28	0.3 J
	OB-27 (032015)		3/20/2015	2.8		76.7	NA	NA	NA	NA	NA	NA
	OB-27 (042115)		4/21/2015	3.1		87.2	NA	NA	NA	NA	NA	NA
	OB-27 (060115)		6/1/2015	3.0		79	NA	NA	NA	NA	NA	NA
	OB-27(080615)		8/6/2015	3.0	6.2J	83	26 B	<0.2	<0.92 B	<0.2	NA	NA
	OB-27(121415)		12/14/2015	1.9	1.28	48 J	NA	NA	NA	NA	NA	NA
	OB-27(050216)[2]		5/2/2016	2.1/2.4	1.2/7.32	55/63	NA	NA	NA	NA	NA	NA
	OB-27(081716)		8/17/2016	2.3	6.47	61	22.5	1.1 J	< 0.71	< 0.44	NA	NA
	OB-27(020217)		2/2/2017	2	5.81	50	36.1	1.1 J	< 0.64	< 0.38	NA	NA
	OB-27(082217)		8/22/2017	2.1	15.5	79	23.1	< 0.38	< 0.64	< 0.38	NA	NA
	OB-27(082218)		8/22/2018	3.3	17	180	25.4	1.1 J	< 0.77	< 0.37	NA	NA
OB-28	OB-28(052710)	3-18'	5/27/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-28(051911)		5/19/2011	< 0.26		<1	9.8	24.4	< 0.92	4.0 J	NA	NA
	OB-28(041712)		4/17/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-28 (110613)		11/6/2013	< 0.28	.	<1	< 1.5	< 4.2 B	< 1.5	< 2.4	NA	NA
	OB-28 (091014)		9/10/2014	< 0.21		<1	< 2.6	1.7 B	< 2.6	1.5 B	NA	NA
	OB-28 (081315)		8/13/2015	<0.2	<0.27	<1	1.5 J	1.0 J	0.82 J	<0.2	NA	NA
	OB-28 (052316)[2]		5/23/2016	<1/<0.09	<0.40/<0.0735	<1/<0.13	NA	NA	NA	NA	NA	NA
	OB-28 (081616)		8/16/2016	< 0.09	< 0.0833	< 0.37	< 0.71	0.79 J	< 0.71	< 0.44	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
	OB-28 (082417)		8/24/2017	< 0.09	< 0.0798	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-28 (082118)		8/21/2018	< 0.43	< 0.017	< 0.32	0.99 J	1 J	< 0.77	< 0.37	NA	NA
OB-29	OB-29(051112)	18-35'	5/11/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-29 (111413)		11/14/2013	< 0.28 J		<1 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-29(090914)		9/9/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	1.6 B	NA	NA
	OB-29(081215)		8/12/2015	<0.2	<0.27	<1	<1.5 B	0.54 J	12	<0.2	NA	NA
	OB-29(081616)		8/16/2016	< 0.09	0.156	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-29(081817)		8/18/2017	< 0.09	0.17	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-29(082218)		8/22/2018	< 0.43	< 0.016	< 0.32	< 0.77	0.42 J	< 0.77	< 0.37	NA	NA
OB-30A	OB-30A(051012)	8-18'	5/10/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-30A(082418)		8/24/2018	< 0.43	0.34 B	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
OB-30B	OB-30B(051112)	21-36'	5/11/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-30B (110713)		11/7/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-30B(090414)		9/4/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-30B (080615)		8/6/2015	<0.2	<0.27	<1	<0.89 B	<0.2	0.58 J	0.33 J	NA	NA
	OB-30B (081716)		8/17/2016	< 0.09	0.266	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-30B (082517)		8/25/2017	< 0.09	< 0.0781	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	OB-30B (082218)		8/22/2018	< 0.43	< 0.016	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
OB-30C	OB-30C (5/9/2012)	40-50'	5/9/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-30C (110713)		11/7/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-30C(090414)		9/4/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-30C(080615)		8/6/2015	<0.0.2	<0.27	<1	2.3 B	1.3 J	1.2 J	<0.2	NA	NA
	OB-30C (081716)		8/17/2016	< 0.09	0.11 J	< 0.37	0.82 J	0.52 J	0.88 J	< 0.44	NA	NA
	OB-30C (082517)		8/25/2017	< 0.09	< 0.0781	< 0.37	0.8 J	0.46 J	0.67 J	< 0.38	NA	NA
	OB-30C (082318)		8/23/2018	< 0.43	0.31 B	< 0.32	0.95 J	0.46 UB	0.79 J	< 0.37	NA	NA
OB-31	OB-31 (052516)[2]	23-33'	5/25/2016	<1/<0.09	0.41/1.74	2.7/2.8	NA	NA	NA	NA	NA	NA
	OB-31 (081716)		8/17/2016	0.14 J	1.9	4.9	12.8	0.66 J	< 0.71	< 0.44	NA	NA
	OB-31 (020617)		2/6/2017	< 0.09	2.31	4.2	18.1	0.93 J	< 0.64	< 0.38	NA	NA
	OB-31 (082517)		8/25/2017	< 0.09	2.1	15	14.2	< 0.38	< 0.64	< 0.38	NA	NA
	OB-31 (082218)		8/22/2018	< 0.43	1.1	6.4	15	< 0.37	< 0.77	< 0.37	NA	NA
OB-32	OB-32 (052516)[2]	10-20'	5/25/2016	<1/<0.09	<0.40/0.412	<1/0.3J	NA	NA	NA	NA	NA	NA
	OB-32 (081716)		8/17/2016	< 0.09	0.422	< 0.37	15.2	< 0.44	< 0.71	< 0.44	NA	NA
	OB-32 (020217)		2/2/2017	< 0.09	0.454	< 0.37	3.3	0.67 J	< 0.64	< 0.38	NA	NA
	DUP-01 (020217)		2/2/2017	< 0.09	0.434	< 0.37	3.1	0.65 J	< 0.64	< 0.38	NA	NA
	OB-32 (081717)		8/17/2017	< 0.09	0.56	< 0.37	17.7	< 0.38	< 0.64	< 0.38	NA	NA
	OB-32 (082218)		8/22/2018	< 0.43	< 0.016	< 0.32	14.8	< 0.37	< 0.77	< 0.37	NA	NA
OB-33	OB-33 (052416)[2]	66-76'	5/24/2016	<1/<0.09	<0.42 /<0.0735	<1/<0.13	NA	NA	NA	NA	NA	NA
	OB-33 (081716)		8/17/2016	< 0.09	< 0.0765	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	OB-33 (081717)		8/17/2017	< 0.09	< 0.0742	< 0.37	< 0.64	< 0.38	< 0.64	0.39 J	NA	NA
	OB-33 (082218)		8/22/2018	< 0.43	< 0.016	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
RW-1	RW-1 (110104)	10-31'	11/1/2004	< 1.0		<1	*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	RW-1(10-30)(4/1/05)		4/1/2005	< 0.31		<1	*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	DUP040105		4/1/2005	< 0.31		<1	*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	RW-1 (10-30)		10/9/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-1(10-31)(041807)		4/18/2007	< 0.21		<1	< 1.5	3.8	< 1.5	< 2.8	NA	NA
	RW1(10-31)		10/9/2007	< 0.19		<1	< 1.1	2.5 B	< 1.1	< 0.94	NA	NA
	RW1(11-31) (080506)		5/6/2008	< 0.26		<1	< 1.7	3.4	< 1.7	1.5 B	NA	NA
	RW1(11-31)		9/18/2008	9.8		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-1(10-30)		7/17/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(11-31)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(58-78)(4/1/05)	58-79'	4/1/2005	< 0.31		<1	*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	RW-1 (58-78)		10/9/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-1(58-79)(041807)		4/18/2007	< 0.21		<1	< 1.5	3.1	< 1.5	< 2.8	NA	NA
	RW1(58-79)		10/10/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW1(59-79) (080506)		5/6/2008	< 0.26		<1	< 1.7	2.0 B	< 1.7	2.2 B	NA	NA
	RW1(59-79)		9/19/2008	8.6		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW1(59-79) DUP		9/19/2008	8.4		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-1(58-78)		7/17/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(59-79)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(59-79) DUP		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(64-74) (6/30/2010)		6/30/2010	< 0.23		<1	4.5	< 1.9	2.2 B	< 1.9	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
RW-1	RW-1(64-74)(052611)	64-74'	5/26/2011	< 0.22		<1	4.0	< 0.94	3.2	< 3.0	NA	NA
	RW-1 (64-74)(041712)		4/17/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-1(97-117)(4/1/05)	97-118'	4/1/2005	< 0.31		<1	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	RW-1 (97-117)		10/10/2006	< 0.21		<1	< 1.5	< 2.6 J	< 1.5	4.5 J	NA	NA
	RW-1(97-118)(041807)		4/18/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW1(97-118)		10/10/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW-1(98-118) (5/7/2008)		5/7/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	DUP-03(080507) (RW-1(98-118)		5/7/2008	< 0.26		<1	< 1.7	1.9 B	< 1.7	2.6 B	NA	NA
	RW1(98-118)		9/19/2008	2.0		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-1(97-117)		7/17/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(98-118)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(125.5-151) (3/30/05)	125-151'	3/30/2005	< 0.31		<1	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	RW-1 (125-145)		10/10/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-1(125-146)(041807)		4/18/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW1(125-146)		10/10/2007	< 0.19		<1	< 1.1	1.2 B	< 1.1	< 0.94	NA	NA
	RW-1(126-146) (5/7/08)		5/7/2008	< 0.26		<1	< 1.7	2.1 B	< 1.7	2.2 B	NA	NA
	RW-1 (126-146)		9/22/2008	6.2		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-1(126-146) (7/17/2009)		7/17/2009	< 0.23		<1	< 2.4	2.3 B	< 2.4	< 1.7	NA	NA
	RW-1(126-146)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(131-141) (6/30/2010)	131-141'	6/30/2010	< 0.23		<1	< 1.4	< 1.9	2.5 B	4.9	NA	NA
	RW-1(131-141)(052611)		5/26/2011	< 0.22		<1	2.3 B	< 0.94	1.0 B	< 0.94	NA	NA
	RW-1 (131-141)(041712)		4/17/2012	< 0.22		<1	3 J	< 1.7	< 3	< 1.7	NA	NA
	RW-1(131-141)		6/26/2012	NA		NA	NA	NA	NA	NA	NA	NA
RW-2	RW-2 (19.0-48.5')	19-20'	10/26/2004	< 1.0		<1	< *5.0*	< 3.0	< *5.0*	< 3.0	NA	NA
	RW2-(19-49)		10/4/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-2(19-50)((041007)		4/10/2007	< 0.21		<1	< 1.5	4.1	< 1.5	< 2.8	NA	NA
	RW2(19-50)		10/15/2007	< 0.19		<1	< 1.1	1.2 B	< 1.1	< 0.94	NA	NA
	RW-2(20-50) (5/1/2008)		5/1/2008	< 0.26		<1	< 1.7	4.3	< 1.7	2.9 B	NA	NA
	RW2(20-50)		9/16/2008	7.4		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-2(20-50) (7/10/2009)		7/10/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(20-50) DUP		7/10/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(20-50) (10/26/2009)		10/26/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(20-50) (10/26/2009) DUP		10/26/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2 (102.5-132.0')	102-133	10/26/2004	< 1.0		<1	< *5.0*	7.3	< *5.0*	< 3.0	NA	NA
	RW2-(102-132)		10/4/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	3.2	NA	NA
	RW-2(102-133)(041007)		4/10/2007	< 0.21		<1	< 1.5	11.2	< 1.5	< 2.8	NA	NA
	RW2(102-133)		10/15/2007	< 0.19		<1	< 1.1 J	< 0.94	1.1 BJ	< 0.94	NA	NA
	RW-2(103-133) (5/1/2008)		5/1/2008	< 0.26		<1	< 1.7	5.4	< 1.7	2.1 B	NA	NA
	RW-2 (103-133)		9/17/2008	43.8		<1	1.7 B	< 1.4	< 1.7	< 1.4	NA	NA
	RW-2 (102-133) (7/13/2009)		7/13/2009	< 0.23		<1	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-2(103-133)		10/27/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2 (161.0'-190.5')	161-192'	10/27/2004	< 1.0		<1	< *5.0*	64.6	< *5.0*	< 3.0	NA	NA
	RW-2(161-192)		4/16/2007	< 0.21		<1	< 1.5	14.0	< 1.5	< 2.8	NA	NA
	RW2(161-192)		10/16/2007	< 0.19		<1	< 1.1	1.4 B	< 1.1	< 0.94	NA	NA
	RW-2 (162-192)		7/13/2009	< 0.23		<1	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-2(162-192)		10/27/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2 (278'-307.5')	279-289'	10/27/2004	< 1.0		<1	< *5.0*	7.6 J	< *5.0*	< 3.0	NA	NA
	REP102704		10/27/2004	< 1.0		<1	< *5.0*	26.4 J	< *5.0*	3.2	NA	NA
	RW-2 (278-308)		10/6/2006	< 0.21		<1	< 1.5	2.8 B	< 1.5	3.6	NA	NA
	RW-2(278-309)(041707)		4/17/2007	< 0.21		<1	< 1.5	5.9	< 1.5	5.2	NA	NA
	RW2(278-309)		10/16/2007	< 0.19		<1	< 1.1	3.2	< 1.1	< 0.94	NA	NA
	RW-2(279-309) (9/11/2008)		9/11/2008	< *6*		<*1*	< 1.7	21.2	< 1.7	< 1.4	NA	NA
	RW-2 (279-309) (7/13/2009)		7/13/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(279-309)		10/27/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(279-289)		6/29/2010	< 0.23		<1	3.0	< 1.9	3.7	< 1.9	NA	NA
	RW-2(279-289)(052411)		5/24/2011	< 0.22		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	RW-2(279-289)(050812)		5/8/2012	< 0.22		<1	< 0.97	< 1.7	1.3 J	< 1.7	NA	NA
	RW-2 (279-289)(111913)		11/19/2013	< 0.28		<1	3.8	< 2.4	< 1.5	< 2.4	NA	NA
	RW-2(279-289)(092614)		9/26/2014	< 0.21		<1	5.2	< 1.3	4.1	< 1.3	NA	NA
	RW-2(279-289)(082115)		8/21/2015	0.22 J	10	<1	1.9 J	<0.2	2.1	<0.2	NA	NA
RW-2	RW-2(279-289)(082216)		8/22/2016	0.34 J	11.9	< 0.37	1.7 J	< 0.44	1.9 J	< 0.44	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
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Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
RW-3	RW-2(279-289)(020717)	452-472'	2/7/2017	0.27 J	10.6	< 0.37	1.5 J	< 0.38	< 0.64	< 0.38	NA	NA
	RW-2(279-289)(082317)		8/23/2017	0.3 J	13.6	< 0.37	1.4 J	< 0.38	1.3 J	< 0.38	NA	NA
	RW-2(279-289)(082818)		8/28/2018	< 0.43	8.1	< 0.32	7.1	< 0.37	1.2 J	< 0.37	NA	NA
	RW-2 (441-470.5')		10/28/2004	< 1.0		<1	6.8	45.5	*< 5.0*	9.3	NA	NA
	RW-2(441-472) (4/17/2007)		4/17/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW2(441-472)		10/17/2007	< 0.19		<1	1.3 B	3.3	< 1.1	< 0.94	NA	NA
	RW-2 (442-472)		5/5/2008	< 0.26		<1	< 1.7	22.2	< 1.7	3.9	NA	NA
	RW-2(441-472) (7/14/2009)		7/14/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(441-472)		10/28/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(452-462) (6/29/2010)		6/29/2010	< 0.23		<1	NA	NA	NA	NA	NA	NA
	RW-2(452-462)		6/3/2011	0.24 J		<1	< 3.0	< 3.0	2.2 J	< 3.0	NA	NA
	RW-2(452-462)(051012)		5/10/2012	0.23 J		<1	2.5 B	< 1.7	< 3.0	< 1.7	NA	NA
	RW-2 (452-462)(111913)		11/19/2013	< 0.28		<1	< 1.5	< 2.4	3.4	< 2.4	NA	NA
	RW-2(452-462)(092614)		9/26/2014	< 0.21		<1	8.3	5.8	7.2	1.8 B	NA	NA
	RW-2(452-462)(082515)		8/25/2015	0.24 J	4.7J	<1	5.4	0.2 J	5.6 J	<0.2	NA	NA
	RW-2(452-462)(082216)		8/22/2016	0.2 J	0.901	< 0.37	4.3	< 0.44	4.8	< 0.44	NA	NA
	RW-2(452-462)(020817)		2/8/2017	0.2 J	1.18	< 0.37	4.7	< 0.38	4.8	< 0.38	NA	NA
	RW-2(452-462)(082317)		8/23/2017	< 0.09	1.23	< 0.37	4.9	< 0.38	4.2	< 0.38	NA	NA
	RW-2(452-462)(082818)		8/28/2018	< 0.43	0.82	< 0.32	4.4	< 0.37	5.1	< 0.37	NA	NA
	RW-3 (65-100')	62-100'	10/29/2004	< 1.0		<1	*< 5.0*	< 3.0	*< 5.0*	< 3.0	NA	NA
	RW-3(65-100)		9/29/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-3(62-98)(040507)		4/5/2007	< 0.21		<1	< 1.5	3.0	< 1.5	< 2.8	NA	NA
	RW3(62-98)		10/12/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW-3(62-98) (4/30/2009)		4/30/2008	< 0.26		<1	< 1.7	4.7	< 1.7	2.3 B	NA	NA
	RW3 (62-98)		9/8/2008	< 0.26		<1	< 1.7	1.6 B	< 1.7	< 1.4	NA	NA
	RW-3(62-98) (7/6/2009)		7/6/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-3(62-98)		10/19/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-3(77-87)		6/28/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-3(052511)		5/25/2011	< 0.22		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	RW-3 (77-87)(042612)		4/27/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-3(77-87)(111113)		11/11/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-3(77-87)(091514)		9/15/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-3(77-87)(080615)		8/6/2015	<0.2	22	<1	<0.88 B	0.26 J	<0.5	<0.2	NA	NA
	RW-3(77-87)(121815)		12/18/2015	<0.09	8.27	<1	NA	NA	NA	NA	NA	NA
	RW-3 (052716)[2]		5/27/2016	<1/<0.09	8.6/28.7	<1/<0.13	NA	NA	NA	NA	NA	NA
	RW-3 (052716) DUP		5/27/2016	<1	6.3	<1	NA	NA	NA	NA	NA	NA
	RW-3(77-87)(082416)		8/24/2016	< 0.09	29.1	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	RW-3(77-87)(081717)		8/17/2017	< 0.09	29.4	< 0.37	< 0.64	0.38 J	< 0.64	< 0.38	NA	NA
	RW-3(77-87)(083018)		8/30/2018	< 0.43	14	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
RW-3D	RW-3D(140-165)	140-165'	6/9/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-3D(140-165) DUP		6/9/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-3D(140-165)(052411)		5/24/2011	< 0.22		2.9	< 0.92	1.5 B	< 0.92	< 0.94	NA	NA
	RW-3D(170-181)	170-181'	6/9/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-3D(170-181)(052411)		5/24/2011	< 0.22		2.7	< 0.92	1.9 B	< 0.92	< 0.94	NA	NA
	RW-3D(170-181)(052411) DUP		5/24/2011	< 0.22		2.9	1.6 B	1.5 B	< 0.92	< 0.94	NA	NA
RW-3DD	RW-3DD (175-180)(043012)	175-180'	4/30/2012	< 0.22		<1	10.4	< 1.7	5.4	< 1.7	NA	NA
	RW-3DD (175-180)(111213)		11/12/2013	< 0.28		<1	21.4	< 2.4	23.1	< 2.4	NA	NA
	RW-3DD (175-180)(091214)		9/12/2014	1.1		<1	13.6 J	< 1.3	18.7 J	< 4.5 B	19.2	18
	RW-3DD (175-180)(081015)		8/10/2015	0.44 J	20	<1	20	<0.2	19	<0.2	NA	NA
	RW-3DD (175-180)(121715)		12/17/2015	0.25J	8.95	<1	NA	NA	NA	NA	NA	NA
	RW-3DD (175-180)(053116)[2]		5/31/2016	0.25J/0.43J	4.9/28.1	<1/<0.13	NA	NA	NA	NA	NA	NA
	RW-3DD (175-180)(082316)		8/23/2016	0.26 J	152/29.2J/20.9*	< 0.37	16.8	< 0.38	16.6	< 0.38	NA	NA
	RW-3DD (175-180)(020817)		2/8/2017	0.35 J	27.7/23	< 0.37	16.6	0.99 J	17.5	< 0.38	NA	NA
	RW-3DD (175-180)(081717)		8/17/2017	0.39 J	26.1	< 0.37	20.9	< 0.38	18.1	< 0.38	NA	NA
	RW-3DD (175-180)(083018)		8/30/2018	< 0.43	12	< 0.32	18.8	< 0.37	17.1	< 0.37	NA	NA
RW-3DS	RW-3DS (155-160)(043012)	155-160'	4/30/2012	< 0.22		<1	7.4	< 1.7	3.3	< 1.7	NA	NA
	RW-3DS (155-160)(111213)		11/12/2013	< 0.28		<1	*< 5.9 B*	3.5	8.1 J	< 3.0 B	NA	NA
	RW-3DS (155-160)(091114)		9/11/2014	< 0.21		<1	9.6	< 1.3	11.8	< 1.3	NA	NA
	RW-3DS (155-160)(082515)		8/25/2015	<0.2	38J	<1	12	<0.2	14	< 1	NA	NA
	RW-3DS (155-160)(121715)		12/17/2015	0.12J	5.25	<1	NA	NA	NA	NA	NA	NA
	RW-3DS (155-160)(052716)[2]		5/27/2016	0.093J/<0.09	3.3/25.5	<1/<0.13	NA	NA	NA	NA	NA	NA

Table 13A
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Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
	RW-3DS (155-160)(082316)		8/23/2016	0.13 J	25.1	< 0.37	14.7	< 0.38	13.5	< 0.38	NA	NA
	RW-3DS (155-160)(020817)		2/8/2017	< 0.09	24.8	< 0.37	13.9	< 0.38	12.9	< 0.38	NA	NA
	RW-3DS (155-160)(081717)		8/17/2017	0.1 J	23.8	< 0.37	16.1	< 0.38	15.8	< 0.38	NA	NA
	RW-3DS (155-160)(083018)		8/30/2018	< 0.43	12	< 0.32	12.4	< 0.37	15.7	< 0.37	NA	NA
RW-4	RW-4 (56.5-75.5')	56-77'	10/22/2004	< 0.31		<1	< *5.0*	4.4	< *5.0*	< 3.0	NA	NA
	RW-4 (57-77)		10/2/2006	< 0.21		<1	< 1.5	6.3	< 1.5	< 2.6	NA	NA
	RW-4(56-77)(040607)		4/6/2007	< 0.21		<1	< 1.5	5.0	< 1.5	< 2.8	NA	NA
	RW4 (56-77)		10/11/2007	< 0.19		<1	< 1.1	1.6 B	< 1.1	< 0.94	NA	NA
	RW-4(57-77) (4/28/2008)		4/28/2008	< 0.26		<1	< 1.7	3.4	< 1.7	< 1.4	NA	NA
	RW4(57-77)		9/15/2008	14.3		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-4(56-77)		6/30/2009	< 0.23		<1	< 2.4	3.4 J	< 2.4	< 1.7	NA	NA
	RW-4(57-77)		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4 (108-127')	108-129'	10/22/2004	< 0.31		<1	< *5.0*	18.6	< *5.0*	< 3.0	NA	NA
	RW-4 (108-128)		10/2/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-4(108-129)		4/9/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW4 (108-129)		10/11/2007	< 0.19		<1	< 1.1	< 0.94	1.5 B	< 0.94	NA	NA
	RW-4(108-128) (4/29/2008)		4/29/2008	< 0.26		<1	< 1.7	3.1	< 1.7	< 1.4	NA	NA
	RW4(108-128)		9/16/2008	3.3		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-4(108-128) (6/30/2009)		6/30/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4(108-128)		10/22/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4 (328-347')	328-349'	10/25/2004	< 0.31		<1	< *5.0*	12.6	< *5.0*	< 3.0	NA	NA
	RW-4 (328-348)		10/3/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-4(328-349)(040907)		4/9/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW4 (328-349)		10/11/2007	< 0.19		<1	< 1.1	2.1 B	< 1.1	< 0.94	NA	NA
	RW-4(328-348) (4/29/2008)		4/29/2008	< 0.26		<1	< 1.7	2.5 B	< 1.7	1.8 B	NA	NA
	RW-4(328-348) (9/9/2008)		9/9/2008	0.30 J		<1	< 1.7	1.8 B	2.7 B	< 1.4	NA	NA
	RW-4(328-349) (7/2/2009)		7/2/2009	< 0.23		<1	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-4(328-348)		10/23/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4 (333-343)		6/7/2011	< 0.05		<1	< 0.92	1.3 B	< 0.92	1.4 B	NA	NA
	RW-4 (333-343)(042512)		4/25/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-4(333-343)(111113)		11/11/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-4(333-343) (090914)		9/9/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-4(333-343) (082415)		8/24/2015	<0.2	<0.27	<1	0.9 J	<0.2	1.1 J	<0.2	NA	NA
	RW-4(333-343) (082416)		8/24/2016	< 0.09	< 0.0765	< 0.37	1.1 J	< 0.38	0.83 J	< 0.38	NA	NA
	RW-4(333-343) (082517)		8/25/2017	0.14 J	< 0.0781	< 0.37	1 J	< 0.38	0.77 J	< 0.38	NA	NA
	RW-4(333-343) (083018)		8/30/2018	< 0.43	< 0.016	< 0.32	0.82 J	< 0.37	< 0.77	< 0.37	NA	NA
RW-4	RW-4 (388-407')	388-409'	10/25/2004	< 0.31		<1	< *5.0*	12.5	< *5.0*	3.0	NA	NA
	RW-4 (388-408)		10/3/2006	< 0.21		<1	< 1.5	3.7	< 1.5	< 2.6	NA	NA
	RW-4(388-409)(040907)		4/9/2007	< 0.21		<1	< 1.5	3.0 B	< 1.5	< 2.8	NA	NA
	RW4 (388-409)		10/11/2007	< 0.19		<1	< 1.1	2.4 B	< 1.1	< 0.94	NA	NA
	RW-4(388-408) (4/29/2008)		4/29/2008	< 0.26		<1	< 1.7	3.3	< 1.7	< 1.4	NA	NA
	RW-4(388-408) (9/10/2008)		9/10/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-4(388-408) (7/2/2009)		7/2/2009	< 0.23		<1	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-4(388-408)		10/23/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4(393-403) (6/8/2010)		6/8/2010	< 0.23		<1	< 1.4	3.2	< 1.4	< 1.9	NA	NA
	RW-4(393-403) (6/8/2010) DUP		6/8/2010	< 0.23		<1	< 1.4	2.7 B	< 1.4	< 1.9	NA	NA
	RW-4(393-403)		6/25/2010	< 0.23		<1	1.8 B	< 1.9	5.4	< 1.9	NA	NA
	RW-4(393-403) DUP		6/25/2010	< 0.23		<1	2.0 B	2.0 B	2.2 B	< 1.9	NA	NA
	RW-4(393-403)(052511)		5/25/2011	< 0.22		<1	< 3.0	< 3.0	< 0.92	< 3.0	NA	NA
	RW-4 (393-403)(042612)		4/26/2012	< 0.22		<1	< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
	RW-4(393-403)(111113)		11/11/2013	< 0.28		<1	3.6	44.6	< 1.5	< 2.4	NA	NA
	RW-4(393-403) (091014)		9/10/2014	< 0.21		<1	9.6	13.8	< 2.6	2.6 B	NA	NA
	RW-4(393-403) (081015)		8/10/2015	< 0.2	<0.27	<1	0.59 J	1.8 J	< 0.5	< 0.2	NA	NA
	RW-4(393-403) (082416)		8/24/2016	< 0.09	< 0.0798	< 0.37	< 0.64	0.38 J	< 0.64	< 0.38	NA	NA
	RW-4(393-403) (082517)		8/25/2017	0.1 J	< 0.0781	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	RW-4(393-403) (083018)		8/30/2018	< 0.43	< 0.016	< 0.32	< 0.77	0.46 UB	< 0.77	< 0.37	NA	NA
	RW-4A(62-72) (6/7/2010)	62-72'	6/7/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-4A(62-72)		6/25/2010	< 0.23		<1	1.5 B	< 1.9	< 1.4	< 1.9	NA	NA
	RW-4A(62-72)(052511)		5/25/2011	< 0.22		<1	< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
	RW-4A (62-72)(042512)		4/25/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-4A (62-72)(110813)		11/8/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
RW-4A	RW-4A(62-72)(091014)	62-72	9/10/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-4A(62-72)(081015)		8/10/2015	<0.2	<0.27	<1	<0.5	0.44 J	<0.5	<0.2	NA	NA
	RW-4A(62-72)(082516)		8/25/2016	< 0.09	< 0.0781	< 0.37	< 0.64	0.83 J	< 0.64	< 0.38	NA	NA
	RW-4A(62-72)(082217)		8/22/2017	< 0.09	< 0.0735	< 0.37	< 0.64	3.6	< 0.64	< 0.38	NA	NA
	RW-4A(62-72)(083018)		8/30/2018	< 0.43	< 0.016	< 0.32	< 0.77	1.6 UB	< 0.77	< 0.37	NA	NA
	RW-4A(113-123) (6/8/2010)	113-123'	6/8/2010	< 0.23		<1	3.0	< 1.9	3.0	< 1.9	NA	NA
	RW-4A(113-123)		6/25/2010	< 0.23		<1	2.6 B	< 1.9	2.0 B	< 1.9	NA	NA
	RW-4A(113-123)(052511)		5/25/2011	< 0.22		<1	< 0.92	< 0.94	< 0.92	< 3.0	NA	NA
	RW-4A (113-123)(042512)		4/25/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-4A (113-123)(110813)		11/8/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-4A(113-123)(091014)		9/10/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-4A(113-123)(082415)		8/24/2015	<0.2	<0.27	<1	<0.5	<0.2	<0.5	<0.2	NA	NA
	RW-4A(113-123)(082416)		8/24/2016	< 0.09	< 0.0735	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	RW-4A(113-123)(081617)		8/16/2017	< 0.09	< 0.0765	< 0.37	< 0.64	0.52 J	< 0.64	< 0.38	NA	NA
	RW-4A(113-123)(083118)		8/31/2018	< 0.43	< 0.016	< 0.32	< 0.77	0.76 UB	< 0.77	< 0.37	NA	NA
RW-5	RW-05(40-51)	40-51'	9/27/2006	1.0		6.5	1.7 B	68.4	< 1.5	< 2.6	NA	NA
	RW-5(40-51)(041307)		4/13/2007	1.9		14.9	< 1.5	44.3	< 0.94	< 2.8	NA	NA
	19BR-(65-75)	64-76'	5/16/2006	3.4		13.9	17.7	39.8	NA	NA	NA	NA
	RW-5(64-75)		9/29/2006	< 0.21		<1	< 1.5	24.7	< 1.5	*< 7.8*	NA	NA
	RW-5(65-76)(041207)		4/12/2007	1.5		15.4	< 1.5	13.9	NA	*NA*	NA	NA
RW-5	19BR-(100-120)	99-120'	5/17/2006	3.0		17.7	*< 3.1*	3.3	*< 3.1*	< 2.6	NA	NA
	RW-5 (100-120)		10/5/2006	1.8		18.7	4.7	32.7	< 1.5	< 2.6	NA	NA
	RW-5(97-118)		4/12/2007	2.6		22.2	< 1.5	7.0	< 1.5	4.6	NA	NA
	RW-5(071015)		10/15/2007	1.8		24	< 1.1	1.5 B	< 1.1	1.0 B	NA	NA
	RW-5(080502)		5/2/2008	0.89 J		17.8	4.1	< 1.4	< 1.7	< 1.4	NA	NA
	RW-5 (080917)		9/17/2008	0.41 J		17.6	2.4 B	< 1.4	1.8 B	< 1.4	NA	NA
	RW-5 (080917) DUP		9/17/2008	0.42 J		18.2	2.3 B	< 1.4	< 1.7	< 1.4	NA	NA
	RW-5(070709)		7/7/2009	0.26 J		18.6	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-5(102709)		10/27/2009	< 0.23		7.4	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-5(060210)		6/2/2010	NA		NA	2.1 B	< 1.9	< 1.4	< 1.9	NA	NA
	RW-5(060410)		6/4/2010	0.24 J		9.1	NA	NA	NA	NA	NA	NA
	RW-5 (052011)		5/20/2011	< 0.26		7.2	1.1 B	< 0.94	< 0.92	1.3 B	NA	NA
	RW-5 (042612)		4/26/2012	< 0.22		5.1 J	< 3.0	1.9 J	< 3.0	< 1.7	NA	NA
	RW-5 (111413)		11/14/2013	< 0.28 J		1.9 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-5 (090414)		9/4/2014	< 0.21		1.7	9.4	4.7	7.9	1.4 B	NA	NA
	RW-5 (080515)		8/5/2015	<0.2	6.75	1.4	8.9 B	6.6	7.2 B	2.4	NA	NA
	RW-5 (121515)		12/15/2015	0.13J	3.28	1.9	NA	NA	NA	NA	NA	NA
	RW-5 (052516)[2]		5/25/2016	<1/<0.09	3.6/10.7	<1/1.4	NA	NA	NA	NA	NA	NA
	RW-5 (081816)		8/18/2016	< 0.09	10.8	2.6	8	1.5	7.9	< 0.44	NA	NA
	RW-5 (020317)		2/3/2017	< 0.09	10.6	1.2	7	2.4	7.5	< 0.38	NA	NA
	RW-5 (083017)		8/30/2017	< 0.09	10.2	1	14.1	4.1	12.8	< 0.38	NA	NA
	RW-5 (082418)		8/24/2018	< 0.43	6.8	1.2	14.3	3.1	16.9	< 0.37	NA	NA
RW-5A	RW-5A(071015)	54-74'	10/15/2007	< 0.19		0.79 J	< 1.1	1.9 B	< 1.1	< 0.94	NA	NA
	RW-SA(080429)		4/29/2008	< 0.26		<1	8.6	2.9 B	11.8	2.5 B	NA	NA
	RW-5A(080912)		9/12/2008	< 0.26		<1	10	2.2 BJ	9.7	< 1.4	NA	NA
	RW-5A(070709)		7/7/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-5A(102809)		10/28/2009	< 0.23		<1	3.5	< 1.7	< 2.4	< 1.7	NA	NA
	RW-5A(060110)		6/1/2010	< 0.23		<1	2.6 B	< 1.9	2.7 B	< 1.9	NA	NA
	RW-5A(060110) DUP		6/1/2010	< 0.23		<1	3.6	< 1.9	2.1 B	< 1.9	NA	NA
	RW-5A(051811)		5/18/2011	< 0.22		<1	2.2 B	1.6 J	1.1 B	< 0.94	NA	NA
	RW-5A (042512)		4/25/2012	< 0.22		<1	4.9 J	< 1.7	5.9 J	< 1.7	NA	NA
	RW-5A (110813)		11/8/2013	< 0.28		<1	6.3	< 2.4	6.7	< 2.4	NA	NA
	RW-5A (091014)		9/10/2014	< 0.21		<1	7.6	2.2 B	4.7	1.8 B	10.5	1 J
	RW-5A (082415)		8/24/2015	1.2	<0.27	<1	3.3	< 0.2	1.1 J	<0.2	NA	NA
	RW-5A (121515)		12/15/2015	0.095J	<0.053	<1	NA	NA	NA	NA	NA	NA
	RW-5A (052516)[2]		5/25/2016	<1/<0.09	<0.42/0.123J	<1/<0.13	NA	NA	NA	NA	NA	NA
	RW-5A (8/18/16)		8/18/2016	< 0.09	< 0.0833	< 0.37	0.97 J	< 0.44	1.3 J	< 0.44	NA	NA
	RW-5A (082317)		8/23/2017	< 0.09	< 0.0815	< 0.37	2.6	0.47 J	< 0.64	< 0.38	NA	NA
	RW-5A (082317) DUP		8/23/2017	< 0.09	< 0.0781	< 0.37	2.8	< 0.38	< 0.64	< 0.38	NA	NA
	RW-5A (082218)		8/22/2018	< 0.43	< 0.016	< 0.32	2.1	< 0.37	< 0.77	< 0.37	NA	NA
	20BR-(53-64)		5/11/2006	2.9		6.5	*< 8.0*	3.2	*< 8.0*	< 3.0	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
RW-6	RW-06(53-64) (9/27/2006)	53-64'	9/27/2006	3.0		6	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-06(53-64) (040207)		4/2/2007	2.6		6.9	1.7 B	4.5	< 1.5	2.9 B	NA	NA
	20BR-(70-81)	70-81'	5/11/2006	2.6		5.4	< *8.0*	< 3.0	< *8.0*	< 3.0	NA	NA
	RW-06(70-81)		9/27/2006	2.6		5.1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-06(70-81)(040307)		4/3/2007	1.9		4.5	< 1.5	32.3 J	< 1.5	< 2.8	NA	NA
RW-6	RW-6 (100-120)	98-120'	10/10/2006	4.0		15	< 1.5	6.9 J	< 1.5	3.1 J	NA	NA
	RW-6(98-119)(040507)		4/6/2007	2.7		11.2	< 1.5	4.6	< 1.5	< 2.8	NA	NA
	RW-6 (071011)		10/11/2007	2.6		8.5	2.5 B	< 0.94	1.2 B	1.3 B	NA	NA
	RW-6(080502)		5/2/2008	1.7		7.9	3.8	1.5 B	2.5 B	< 1.4	NA	NA
	RW-6(080915)		9/15/2008	2.1		7.7	2.4 B	< 1.4	2.1 B	< 1.4	NA	NA
	RW-6(070909)		7/9/2009	2.0		6.4	4.1 J	< 1.7	< 2.4	< 1.7	NA	NA
	RW-6(102809)		10/28/2009	1.5		4.3	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-6(060210)		6/2/2010	NA		NA	2.1 B	< 1.9	< 1.4	< 1.9	NA	NA
	RW-6(060410)		6/4/2010	1.5		4.2	NA	NA	NA	NA	NA	NA
	RW-6(051811)		5/18/2011	1.6		4.5	< 0.92	1.8 J	< 0.92	2.2 B	NA	NA
	RW-6 (042712)		4/27/2012	0.74 J		2.5 J	< 3.0	2.3 J	< 0.97	2.6 J	NA	NA
	RW-6 (111813)		11/18/2013	2.3		5.9	3.6	4.9	3.2	3.6	NA	NA
	RW-6 (090514)		9/5/2014	2.1		3.5	2.6 B	1.3 B	< 2.6	< 1.3	NA	NA
	RW-6(100914)		10/9/2014	15.7		1.3	3.6	< 1.3	3.3	< 1.3	NA	NA
	RW-6(031915)		3/19/2015	344		<1	NA	NA	NA	NA	NA	NA
	RW-6(042215)		4/22/2015	2.2		1.7	NA	NA	NA	NA	NA	NA
	RW-6(060215)		6/2/2015	1.7		1.4	NA	NA	NA	NA	NA	NA
	RW-6(080515)		8/5/2015	1.2	1.5J	3.3	<1.5 B	0.25 J	<1.1 B	<0.2	NA	NA
	RW-6(121415)		12/14/2015	1.5	1.09	5.3	NA	NA	NA	NA	NA	NA
	RW-6(052616)[2]		5/26/2016	2.1/2.0	.37 J/2.89	2.8/3.0	NA	NA	NA	NA	NA	NA
	RW-6(081816)		8/18/2016	1.9	3.7	10	1.2 J	< 0.44	< 0.71	< 0.44	NA	NA
	RW-6(020317)		2/3/2017	2.1	4.44	5.4	1.3 J	0.39 J	< 0.64	< 0.38	NA	NA
	RW-6(081617)		8/16/2017	1.4	4.01	6.1	0.7 J	0.55 J	< 0.64	< 0.38	NA	NA
	RW-6(082318)		8/23/2018	1.3	2.1	3.5	1.1 J	< 0.37	< 0.77	< 0.37	NA	NA
RW-6A	RW-6A(071016)	58-78'	10/16/2007	5.5		2.4	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW-6A(080502)		5/2/2008	1.7		1.9	2.9 B	2.8 B	< 1.7	1.8 B	NA	NA
	RW-6A(080915)		9/15/2008	2.9		2.3	1.9 B	< 1.4	1.7 B	< 1.4	NA	NA
	RW-6A(070909)		7/9/2009	1.3		1.3	< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
	RW-6A (102809)		10/28/2009	2.4		1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-6A(060210)		6/2/2010	1.9		1.4	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-6A(051811)		5/18/2011	1.5		0.95 J	< 0.92	3.1	< 0.92	2.4 B	NA	NA
	RW-6A (042712)		4/27/2012	2.0		1.7 J	< 0.97	1.8 J	< 0.97	< 1.7	NA	NA
	RW-6A (110813)		11/8/2013	15.0		1.6	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-6A (090514)		9/5/2014	88.1		1.1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-6A (100914)		10/9/2014	6.8		1.5	< 5.1	< 1.3	< 5.1	< 1.3	NA	NA
	RW-6A (031915)		3/19/2015	13.3		2.9	NA	NA	NA	NA	NA	NA
	RW-6A (042115)		4/21/2015	8.7		2.3	NA	NA	NA	NA	NA	NA
	RW-6A (042115)		4/21/2015	9.1		1.8	NA	NA	NA	NA	NA	NA
	RW-6A (080415)		8/4/2015	7.7	2.7J	2	<1.4 B	<0.2	<1.1 B	<0.2	NA	NA
	RW-6A(121415)		12/14/2015	5.9	1.28	4.6	NA	NA	NA	NA	NA	NA
	RW-6A(052616)[2]		5/26/2016	5.7/6.9	2.4/4.81	3.0/2.4	NA	NA	NA	NA	NA	NA
	RW-6A(081816)		8/18/2016	8	3.1	5.7	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	RW-6A(020317)		2/3/2017	8.7	3.59	3	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	RW-6A(082917)		8/29/2017	6.1	2.72	1.4	0.65 J	< 0.38	< 0.64	< 0.38	NA	NA
	RW-6A(082318)		8/23/2018	0.9 J	3.1	1.4	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
RW-7	21BR-(34-45)	34-45'	5/9/2006	< 0.21		<1	< *8.0*	< 3.0 J	< *8.0*	< 3.0 J	NA	NA
	RW-07(34-45)		9/26/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-07(34-45)(040307)		4/3/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	21BR-(49-60)		5/9/2006	< 0.21		<1	< *8.0*	< 3.0 J	< *8.0*	< 3.0 J	NA	NA
	RW-07(49-60)		9/26/2006	< 0.21		<1	< 1.5 J	< 2.6	1.8 BJ	< 2.6	NA	NA
	RW-7(49-60) (040407)		4/4/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW-7(071015)		10/15/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW-7 (080505)		5/5/2008	< 0.26		<1	< 1.7	1.5 B	< 1.7	< 1.4	NA	NA
	RW-7(080912)		9/12/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-7(070709)		7/7/2009	< 0.23		<1	< 2.4	5.1	< 2.4	< 1.7	NA	NA
	RW-7(102709)		10/27/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
RW-7	RW-7(102709) DUP	40-62'	10/27/2009	0.41 J		1.4	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-7(060110)		6/1/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-7(051811)		5/18/2011	< 0.22		<1	< 0.92	5.9	< 0.92	1.1 J	NA	NA
	RW-7(042412)		4/24/2012	< 0.22		<1	1.1 B	< 1.7	< 0.97	< 1.7	NA	NA
	RW-7 (110713)		11/7/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 4.1 B	NA	NA
	RW-7 (090415)		9/4/2014	< 0.21		<1	3.6	2.9 B	3.2	< 1.3	NA	NA
	RW-7 (042015)		4/20/2015	<0.24		<1	NA	NA	NA	NA	NA	NA
	RW-7 (080615)		8/6/2015	<0.2	<0.27	<1	<0.74 B	0.48 J	<0.72 B	<0.2	NA	NA
	RW-7 (081816)		8/18/2016	< 0.09	< 0.0781	< 0.37	< 0.71	0.59 J	< 0.71	< 0.44	NA	NA
	RW-7 (083017)		8/30/2017	< 0.09	< 0.0938	< 0.37	< 0.64	0.43 J	< 0.64	< 0.38	NA	NA
	RW-7 (082218)		8/22/2018	< 0.43	< 0.016	< 0.32	< 0.77	0.38 J	< 0.77	< 0.37	NA	NA
RW-7	21BR(80-100)	80-101'	5/10/2006	< 0.21		<1	*< 8.0*	< 3.0	*< 8.0*	< 3.0	NA	NA
	RW-07(80-100)		9/28/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-07(80-101)(040307)		4/3/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	21BR(105-120)	103-120'	5/10/2006	< 0.21		<1	*< 8.0*	< 3.0	*< 8.0*	3.8	NA	NA
	RW-07(105-120)		9/28/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-7(103-119) (040407)		4/4/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
RW-8	RW8(42-62)	42-62'	7/31/2008	0.62 J		<1	< 1.7	4.0	< 1.7	1.9 B	NA	NA
	RW-8(42-62)		11/4/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-8(42-62) (7/7/2009)		7/7/2009	< 0.23		<1	< 2.4	17.9	< 2.4	5.0	NA	NA
	RW8(158-178)	158-178'	7/21/2008	< 0.26		<1	4.3	< 1.4	3.2	< 1.4	NA	NA
	RW-8(158-178) (7/7/2009)		7/7/2009	< 0.23		<1	< 2.4	6.0	< 2.4	< 1.7	NA	NA
	RW-8(158-178)		11/4/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-8(163-173) (6/23/2010)	163-173'	6/23/2010	< 0.23		<1	NA	NA	NA	NA	NA	NA
	RW-8(163-173) (6/24/2010)		6/24/2010	NA		NA	NA	NA	NA	NA	NA	NA
	RW-8(163-173) (6/25/2010)		6/25/2010	NA		NA	2.1 B	< 1.9	NA	NA	NA	NA
	RW-8(163-173)(053111)		5/31/2011	< 0.22		<1	2.1 B	< 0.94	1.1 B	< 0.94	NA	NA
	RW-8(163-173)(060111)		6/1/2011	NA		NA	NA	NA	NA	NA	NA	NA
	RW-8(163-173)		5/3/2012	< 0.22		<1	2.0 J	< 1.7	1.7 J	< 1.7	NA	NA
	RW-8 (163-173)(111513)		11/15/2013	0.34 J		<1 J	2.4 B	< 3.0 B	2.0 B	< 2.4	NA	NA
	RW-8(163-173)(092214)		9/22/2014	< 0.21		<1	4.2	< 1.3	5.2	< 1.3	NA	NA
	RW-8(163-173) (081815)		8/18/2015	0.27 J	<0.27	<1	3.6 B	<0.2	2.1	<0.2	NA	NA
	RW-8(163-173) (082516)		8/25/2016	0.35 J	< 0.0781	< 0.37	1.5 J	< 0.38	1.6 J	< 0.38	NA	NA
	RW-8(163-173) (082117)		8/21/2017	0.22 J	< 0.0798	< 0.37	< 0.64	< 0.38	2.2	< 0.38	NA	NA
	RW-8(163-173) (082918)		8/29/2018	1.4	< 0.016	< 0.32	1.8 J	< 0.37	1.1 J	< 0.37	NA	NA
	RW8(199-219)	199-219'	7/22/2008	0.38 J		<1	2.5 B	< 1.4	3.6	< 1.4	NA	NA
	RW-8(199-219) (7/7/2009)		7/7/2009	< 0.23		<1	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-8(199-219)		11/4/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-8(204-214) (6/23/2010)	204-214'	6/23/2010	< 0.23		<1	NA	NA	NA	NA	NA	NA
	RW-8(204-214) (6/25/2010)		6/25/2010	NA		NA	5.9	< 1.9	NA	NA	NA	NA
	RW-8(204-214)(060111)		6/1/2011	< 0.22		<1	5.1	< 0.94	NA	NA	NA	NA
	RW-8 (204-214)(111413)		11/14/2013	2.2 J		<1 J	1.5 B	< 2.4	NA	NA	NA	NA
	RW-8 (204-214)(111513)		11/15/2013	NA		NA	NA	NA	< 1.5	< 2.4	NA	NA
	RW-8(204-214)(092314)		9/23/2014	0.58		<1	3.6	2.3 B	4.2	< 1.3	NA	NA
	RW-8(204-214)(082015)		8/20/2015	0.57 J	<0.27	<1	2	0.97 J	1.9 J	<0.2	NA	NA
	RW-8(204-214)(082516)		8/25/2016	3.8	0.121 J	< 0.37	1.8 J	< 0.38	1.7 J	< 0.38	NA	NA
	RW-8(204-214)(082217)		8/22/2017	1	< 0.0781	< 0.37	2	< 0.38	2	< 0.38	NA	NA
	RW-8(204-214)(082918)		8/29/2018	2.8	0.44	< 0.32	1.8 J	2.1	1.7 J	< 0.37	NA	NA
RW-9	RW9(20-40)	20-40'	7/30/2008	7.0		<1	< 1.7	5.2	< 1.7	2.1 B	NA	NA
	RW-9(20-40) (7/15/2009)		7/15/2009	< 0.23		<1	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-9(20-40)		11/2/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW9 (80-100)	80-100'	7/23/2008	0.93 J		<1	1.7 BJ	< 1.4	< 1.7	< 1.4	NA	NA
	DUP 1 (RW9 (80-100))		7/23/2008	1.1		<1	2.1 BJ	< 1.4	2.0 B	< 1.4	NA	NA
	RW-9(80-100) (7/15/2009)		7/15/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-9(80-100)		11/2/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW9 (134-154)	134-154'	7/23/2008	0.70 J		<1	< 1.7 J	< 1.4	2.1 BJ	< 1.4	NA	NA
	RW-9(134-154) (7/16/2009)		7/16/2009	< 0.23		<1	< 2.4	6.4 J	< 2.4	< 1.7	NA	NA
	RW-9(134-154) DUP		7/16/2009	< 0.23		<1	< 2.4	6.4	< 2.4	< 1.7	NA	NA
	RW-9(134-154)		11/2/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-9 (139-149)(112013)		11/20/2013	< 0.28 J		<1 J	NA	NA	NA	NA	NA	NA
	RW-9 (201-221)		7/24/2008	1.5		<1	< 1.7	< 1.4	2.4 B	< 1.4	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
	RW-9(201-221) (7/16/2009)	201-221'	7/16/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-9(201-221)		11/3/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
RW-9	RW-9(206-216) (6/23/2010)	206-216'	6/23/2010	< 0.23		<1	NA	NA	NA	NA	NA	NA
	RW-9(206-216) (6/25/2010)		6/25/2010	NA		NA	NA	NA	NA	NA	NA	NA
	RW-9(206-216)		6/28/2010	NA		NA	4.6 J	< 1.9	NA	NA	NA	NA
	RW-9(206-216)(052611)		5/26/2011	< 0.22		<1	NA	NA	NA	NA	NA	NA
	RW-9(206-216)(052711)		5/27/2011	NA		NA	3.3	< 0.94	NA	NA	NA	NA
	RW-9 (206-216)(042012)		4/20/2012	< 0.22		<1	< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
	RW-9 (206-216)(112013)		11/20/2013	< 0.28 J		<1 J	2.2 B	3.0	< 1.5	< 2.4	NA	NA
	RW-9(206-216)(092514)		9/25/2014	< 0.21		<1	7.3	< 1.3	8.9	< 1.3	NA	NA
	RW-9(206-216)(082115)		8/21/2015	<0.2	<0.27	<1	3	<0.2	NA	NA	NA	NA
	RW-9(206-216)(083016)		8/30/2016	0.15 J	< 0.0915	< 0.37	2.8	< 0.38	NA	NA	NA	NA
	RW-9(206-216)(081617)		8/16/2017	< 0.09	< 0.11	< 0.37	3	< 0.38	2	< 0.38	NA	NA
	RW-9(206-216)(082918)		8/29/2018	< 0.43	< 0.016	< 0.32	2.5	< 0.37	2.2	< 0.37	NA	NA
RW-9A	RW-9A(85-95)	85-95'	6/23/2010	0.33 J		<1	NA	NA	NA	NA	NA	NA
	RW-9A(85-95)(060111)		6/1/2011	< 0.22		<1	NA	NA	NA	NA	NA	NA
	RW-9A (85-95)(042012)		4/20/2012	0.23 J		<1	2.8 J	< 1.7	2.5 J	< 1.7	NA	NA
	RW-9A (85-95)(112013)		11/20/2013	< 0.28 J		<1 J	3.4	< 2.4	NA	NA	NA	NA
	RW-9A(85-95)(092314)		9/23/2014	< 0.21		<1	5.3	< 1.3	3.7	< 1.3	NA	NA
	RW-9A(85-95)(082115)		8/21/2015	<0.2	<0.27	<1	3.2	<0.2	3.4	<0.2	NA	NA
	RW-9A(85-95)(083016)		8/30/2016	< 0.09	< 0.0815	< 0.37	3	< 0.38	2.9	< 0.38	NA	NA
	RW-9A(85-95)(081617)		8/16/2017	< 0.09	< 0.0987	< 0.37	2.4	< 0.38	2.7	< 0.38	NA	NA
	RW-9A(85-95)(082918)		8/29/2018	< 0.43	< 0.016	< 0.32	2.6	< 0.37	2.6	< 0.37	NA	NA
RW-10	RW-10(22-42) (7/8/2009)	22-42'	7/8/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-10(22-42)		10/29/2009	< 0.23		<1	< 2.4	2.2 B	< 2.4	< 1.7	NA	NA
	RW-10 (46-66)	46-66'	7/25/2008	< 0.26		<1	2.2 B	2.8 B	2.2 B	1.6 B	NA	NA
	RW-10(46-66) (7/9/2009)		7/9/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-10(46-66)		10/29/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW10(70-90)	70-90'	7/28/2008	0.26 J		<1	2.4 B	7.3	< 1.7	1.6 B	NA	NA
	RW-10(70-90) (7/9/2009)		7/9/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-10(70-90)		10/29/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW10 (115-135)	120-130'	7/28/2008	< 0.26		<1	2.0 B	6.0	< 1.7	1.4 B	NA	NA
	RW-10(115-135) (7/9/2009)		7/9/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-10(115-135)		10/29/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-10(120-130) (6/23/2010)		6/23/2010	< 0.23		NA	NA	NA	NA	NA	NA	NA
	RW-10(120-130) (6/24/2010)		6/24/2010	NA		NA	NA	NA	NA	NA	NA	NA
	RW-10(120-130) (6/25/2010)		6/25/2010	NA		<1	4.3	< 1.9	NA	NA	NA	NA
	RW-10(120-130)(053111)		5/31/2011	< 0.22		NA	4.8	2.5 B	NA	NA	NA	NA
	RW-10(120-130)(060111)		6/1/2011	NA		<1	NA	NA	4.1	2.3 B	NA	NA
	RW-10 (120-130)(041912)		4/19/2012	< 0.22		<1 J	3.7 J	< 1.7	3.6 J	< 1.7	NA	NA
	RW-10 (120-130)(111513)		11/15/2013	< 0.28 J		<1	9.5	5.0 J	8.0	5.1 J	NA	NA
	RW-10(120-130)(091714)		9/17/2014	< 0.21		<1	8.2	6.3	9.1	< 3.0 B	8.6	8.5
	RW-10(120-130)(081915)		8/19/2015	<0.2	<0.27	<1	7.5 B	<0.2	6.7	<0.2	NA	NA
	RW-10(120-130)(082916)		8/29/2016	< 0.09	0.0883 J	< 0.37	6.6	< 0.38	7.2	< 0.38	NA	NA
	RW-10(120-130)(082317)		8/23/2017	0.092 J	< 0.0833	< 0.37	7	0.94 J	7.8	< 0.38	NA	NA
	RW-10(120-130)(082818)		8/28/2018	< 0.43	< 0.016	< 0.32	8.1	1.2	7.5	< 0.37	NA	NA
	RW-10 (180-200)	185-195'	7/29/2008	0.57 J		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-10(180-200) (7/9/2009)		7/9/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-10(180-200)		10/30/2009	< 0.23		<1	< 2.4	6.0	NA	NA	NA	NA
	RW-10(180-200) DUP		10/30/2009	< 0.23		<1	< 2.4	7.0	< 2.4	< 1.7	NA	NA
	RW-10(180-200)MS		10/30/2009	NA		NA	NA	NA	< 2.4	< 1.7	NA	NA
	RW-10(185-195) (6/9/2010)		6/9/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-10(185-195) (6/23/2010)		6/23/2010	< 0.23		<1	NA	NA	NA	NA	NA	NA
	RW-10(185-195) (6/25/2010)		6/25/2010	NA		NA	2.2 B	< 1.9	NA	NA	NA	NA
	RW-10(185-195) (6/28/2010)		6/28/2010	NA		NA	NA	NA	< 1.4	< 1.9	NA	NA
	RW-10(185-195)(053111)		5/31/2011	< 0.22		<1	< 0.92	1.0 B	< 0.92	1.4 B	NA	NA
	RW-10(185-195)(041812)		4/18/2012	< 0.22		<1	3.6 J	< 1.7	3.6 J	< 1.7	NA	NA
	RW-10 (185-195)(111313)		11/13/2013	< 0.28		<1	7.9	< 4.2 B	6.6	< 3.2 B	NA	NA
	RW-10(185-195)(091714)		9/17/2014	< 0.21		<1	7.9	3.5	9.7	2.5 B	NA	NA
	RW-10(185-195)(081815)		8/18/2015	<0.2	<0.27	<1	6.7 B	<0.2	5.2	<0.2	NA	NA
	RW-10(185-195)(082616)		8/26/2016	< 0.09	< 0.0815	< 0.37	4.6	< 0.38	5.1	< 0.38	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
	RW-10(185-195)(082217)		8/22/2017	< 0.09	< 0.0765	< 0.37	5.7	< 0.38	6.2	< 0.38	NA	NA
	RW-10(185-195)(082818)		8/28/2018	< 0.43	< 0.016	< 0.32	3.9	< 0.37	5.3	< 0.37	NA	NA
RW-10A	RW-10A(51-61)(060211)	51-61'	6/2/2011	< 0.22		<1	< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
	RW-10A(51-61)(041812)		4/18/2012	< 0.22		<1	< 3	< 1.7	< 3	< 1.7	NA	NA
	RW-10A (51-61)(111513)		11/15/2013	< 0.28 J		<1 J	2.1 B	< 3.1 B	NA	NA	NA	NA
	RW-10A(51-61)(091814)		9/18/2014	< 0.21		<1	< 2.6	< 3.0 B	< 2.6	< 3.0 B	NA	NA
	RW-10A(51-61)(082015)		8/20/2015	<0.2	<0.27	<1	2.1	< 0.2	1.5 J	<0.2	NA	NA
	RW-10A(51-61)(082916)		8/29/2016	< 0.09	< 0.0798	< 0.37	0.86 J	< 0.38	0.79 J	< 0.38	NA	NA
	RW-10A(51-61)(082818)		8/28/2018	< 0.43	< 0.016	< 0.32	< 0.77	0.4 J	< 0.77	< 0.37	NA	NA
	RW-10A(75-85) (6/9/2010)	75-85'	6/9/2010	< 0.23		<1	< 1.4	< 1.9	<0.0002	< 1.9	NA	NA
	RW-10A(75-85) (6/23/2010)		6/23/2010	< 0.23		<1	NA	NA	NA	NA	NA	NA
	RW-10A(75-85)		6/28/2010	NA		NA	< 1.4	4.0 J	< 1.4	< 1.9	NA	NA
	RW-10A(75-85)(060211)		6/2/2011	< 0.22		<1	< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
	RW-10A(75-85)(041812)		4/18/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-10A(75-85)(041812) DUP		4/18/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-10A(75-85)(050712)		5/7/2012	NA		NA	NA	NA	NA	NA	NA	NA
	RW-10A (75-85)(111413)		11/14/2013	< 0.28 J		<1 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-10A(75-85)(091814)		9/18/2014	< 0.21		<1	< 2.6	3.0	< 2.6	< 3.0 B	NA	NA
	RW-10A(75-85)(081815)		8/18/2015	<0.2	<0.27	<1	2 B	0.82 J	<0.5	0.26 J	NA	NA
	RW-10A(75-85)(082616)		8/26/2016	< 0.09	< 0.075	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	RW-10A(75-85)(082217)		8/22/2017	< 0.09	< 0.0781	< 0.37	< 0.64	0.5 J	< 0.64	< 0.38	NA	NA
	RW-10A(75-85)(082818)		8/28/2018	< 0.43	< 0.016	< 0.32	< 0.77	1.1 J	< 0.77	< 0.37	NA	NA
RW-11	RW-11(100-125) (6/7/2010)	100-125'	6/7/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-11(100-125)		5/26/2011	< 0.22		<1	< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
	RW-11(142-167) (6/7/2010)	142-167'	6/7/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-11(142-167)		5/26/2011	< 0.22		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	RW-11(221-246) (6/8/2010)	221-246'	6/8/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-11(221-246)		5/25/2011	< 0.22		<1	< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
	RW-11(252-272) (6/8/2010)	252-272'	6/8/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-11(252-272)		5/25/2011	< 0.22		<1	< 0.92	< 3.0	< 0.92	1.7 J	NA	NA
RW-11D	RW-11D (262-267) (050112)	262-267'	5/1/2012	< 0.22		<1	NA	NA	NA	NA	NA	NA
	RW-11D (262-267)(111413)		11/14/2013	0.56 J		<1 J	< 1.5	3.3	< 1.5	< 2.4	NA	NA
	RW-11D(262-267)(091514)		9/15/2014	2.0		<1	< 3.0 B	< 1.3	< 2.6	< 1.3	NA	NA
	RW-11D(262-267)(082615)		8/26/2015	1.6	26J	<1	2.4	0.69 J	< 2.5	< 1	NA	NA
	RW-11D(262-267)(121715)		12/17/2015	2.4	17.9	<1	NA	NA	NA	NA	NA	NA
	RW-11D(262-267)(052716)[2]		5/27/2016	3.0/3.5	16/54.6	1.6/2.0	NA	NA	NA	NA	NA	NA
	RW-11D(262-267)(8/23/16)		8/23/2016	6.4	73.4/54.4**	8.6	0.88 J	< 0.38	0.92 J	< 0.38	NA	NA
	RW-11D(262-267)(020717)		2/7/2017	1.5	86.6	< 0.37	0.68 J	< 0.38	0.67 J	< 0.38	NA	NA
	RW-11D(262-267)(082917)		8/29/2017	6.3	88.3	4.6	0.76 J	< 0.38	0.68 J	< 0.38	NA	NA
	RW-11D(262-267)(083118)		8/31/2018	11	41	5.5	0.93 J	0.59 UB	< 0.77	< 0.37	NA	NA
RW-11S	RW-11S (236-241) (050112)	236-241'	5/1/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-11S (236-241)(111313)		11/13/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-11S (236-241)(091214)		9/12/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	DUP(091214)		9/12/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-11S (236-241)(081715)		8/17/2015	<0.2	1.1J	<1	1 J	<0.2	<0.5	<0.2	NA	NA
	RW-11S (236-241)(121715)		12/17/2015	<0.09	1.88	<1	NA	NA	NA	NA	NA	NA
	RW-11S (236-241)(052716)[2]		5/27/2016	<1/<0.09	0.60/1.05	<1/<0.13	NA	NA	NA	NA	NA	NA
	RW-11S (236-241)(082316)		8/23/2016	< 0.09	1.08	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	DUP-02-020717		2/7/2017	0.12 J	1.39	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	RW-11S (236-241)(020717)		2/7/2017	0.12 J	1.34	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	RW-11S (236-241)(082517)		8/25/2017	< 0.09	1.63	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	RW-11S (236-241)(083118)		8/31/2018	< 0.43	0.9	< 0.32	< 0.77	0.44 UB	< 0.77	< 0.37	NA	NA
RW-12	RW-12(50-70)	50-70'	5/10/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-12(55-65)(091914)		9/19/2014	< 0.21		<1	< 2.6	< 3.0 B	2.6 B	< 3.0 B	NA	NA
	RW-12(55-65)(081715)		8/17/2015	<0.2		<1	13	<0.2	12	<0.2	NA	NA
	RW-12(55-65)(082216)		8/22/2016	< 0.09	< 0.0815	< 0.37	12	< 0.44	13.9	< 0.44	NA	NA
	RW-12(55-65)(081817)		8/18/2017	< 0.09	< 0.0815	< 0.37	16.4	< 0.38	17.4	< 0.38	NA	NA
	RW-12(55-65)(082918)		8/29/2018	< 0.43	< 0.016	< 0.32	14.8	0.57 J	16	< 0.37	NA	NA
	RW-12(96-116)	96-116'	5/10/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-12(125-148)		5/11/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-12(130-140)(091914)		9/19/2014	< 0.21		<1	< 2.6	< 3.0 B	< 2.6	< 3.0 B	NA	NA

Table 13A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
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Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
RW-13	RW-12(130-140)(081215)	125-148'	8/12/2015	<0.2	<0.27	<1	13 B	<0.2	<0.5	<0.2	NA	NA
	RW-12(130-140)(082516)		8/25/2016	< 0.09	< 0.0781	< 0.37	13.5	0.41 J	15	< 0.38	NA	NA
	RW-12(130-140)(081817)		8/18/2017	< 0.09	< 0.0781	< 0.37	8.2	4.5	7	< 0.38	NA	NA
	RW-12(130-140)(082918)		8/29/2018	< 0.43	< 0.016	< 0.32	5.6	0.93 J	5.7	< 0.37	NA	NA
	RW-13(71-91) (090914)	71-91'	9/9/2014	< 0.21		<1	6.3	3.7	4.9	3.7	NA	NA
	RW-13(71-91) (082415)		8/24/2015	<0.2		<1	2.9	2.3	2	<0.2	NA	NA
	RW-13(71-91) (082516)		8/25/2016	< 0.09	0.201	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	RW-13(71-91) (081617)		8/16/2017	< 0.09	0.277	< 0.37	< 0.64	0.4 J	< 0.64	< 0.38	NA	NA
	RW-13(71-91) (082418)		8/24/2018	< 0.43	0.5 B	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
	RW-13(71-91) (082418) DUP		8/24/2018	< 0.43	0.45 B	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
	RW-13(100-120)(091614)	100-120'	9/16/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-13(100-120)(081315)		8/13/2015	<0.2		<1	3.2	<0.2	2.1	<0.2	NA	NA
	RW-13(100-120)(081315)		8/13/2015	< 0.09	0.0972 J	< 0.37	3.1	0.78 J	NA	NA	NA	NA
	RW-13(100-120)(082917)		8/29/2017	< 0.09	0.148 J	< 0.37	4.2	0.7 J	4.2	< 0.38	NA	NA
	RW-13(100-120)(083018)		8/30/2018	< 0.43	< 0.016	< 0.32	2.7	1.1 UB	3.6	< 0.37	NA	NA
	RW-13(150-170)(091614)	150-170'	9/16/2014	< 0.21		<1	< 2.6	1.7 B	2.9 B	< 1.3	NA	NA
	RW-13(150-170)(082115)		8/21/2015	<0.2	<0.27	<1	4.6 B	0.33 J	2	0.31 J	NA	NA
	RW-13(150-170)(082616)		8/26/2016	< 0.09	< 0.0765	< 0.37	1.6 J	0.54 J	1.4 J	< 0.38	NA	NA
	RW-13(150-170)(082517)		8/25/2017	< 0.09	< 0.0781	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	RW-13(150-170)(083018)		8/30/2018	< 0.43	< 0.016	< 0.32	< 0.77	0.66 UB	< 0.77	< 0.37	NA	NA
RW-14S	RW-14S (053116)[2]	135-135'	5/31/2016	0.22 J/0.17 J	0.19 J/0.645	1.9/<0.13	NA	NA	NA	NA	NA	NA
	RW-14S (135-155)(082916)		8/29/2016	< 0.09	0.251	< 0.37	14	0.81 J	11.3	< 0.38	NA	NA
	RW-14S (135-155)(020817)		2/8/2017	< 0.09	< 0.0735	< 0.37	6.6	< 0.38	7	< 0.38	NA	NA
	RW-14S (135-155)(081817)		8/18/2017	< 0.09	0.163	< 0.37	4.8	< 0.38	4.7	< 0.38	NA	NA
	RW-14S (135-155)(083118)		8/31/2018	< 0.43	< 0.016	< 0.32	1.4 J	< 0.37	2.1	< 0.37	NA	NA
RW-14D	RW-14D (053116)[2]	175'-185'	5/31/2016	0.39J/0.26J	0.17J/0.891	3.3/1.6	NA	NA	NA	NA	NA	NA
	RW-14D (175-185)(082916)		8/29/2016	0.31 J	0.973	< 0.37	8.8	< 0.38	1.1 J	< 0.38	NA	NA
	RW-14D (175-185)(020817)		2/8/2017	0.21 J	0.834	< 0.37	13.8	< 0.38	0.88 J	< 0.38	NA	NA
	RW-14D (175-185)(081617)		8/16/2017	0.31 J	0.719	1.3	8.9	< 0.38	1.4 J	< 0.38	NA	NA
	RW-14D (175-185)(083118)		8/31/2018	< 0.43	0.36	0.6 J	5.2	< 0.37	1.3 J	< 0.37	NA	NA
RW-15S	RW-15S (052716)[2]	110-120'	5/27/2016	<1/<0.09	0.15 J/0.543	<1/<0.13	NA	NA	NA	NA	NA	NA
	RW-15S (110-120)(082416)		8/24/2016	< 0.09	0.277 B	< 0.37	12.7	0.58 J	7.8	< 0.38	NA	NA
	RW-15S (110-120)(020817)		2/8/2017	< 0.09	0.252	< 0.37	25.6	< 0.38	12.6	< 0.38	NA	NA
	RW-15S (110-120)(020817)		8/17/2017	< 0.09	< 0.0773	< 0.37	36.8	< 0.38	27.9	< 0.38	NA	NA
	RW-15S (110-120)(083118)		8/31/2018	< 0.43	< 0.016	< 0.32	20.8	< 0.37	28.3	< 0.37	NA	NA
	RW-15S (110-120)(083118)		8/31/2018	< 0.43	< 0.016	< 0.32	23.5	0.51 UB	31	< 0.37	NA	NA
	RW-15S (110-120)(083118) DUP		8/31/2018	< 0.43	< 0.016	< 0.32	20.8	< 0.37	28.3	< 0.37	NA	NA
RW-15D	RW-15D (052716)[2]	127-137'	5/27/2016	<1/<0.09	0.47/0.843	<1/<0.13	NA	NA	NA	NA	NA	NA
	RW-15D (127-137)(082416)		8/24/2016	< 0.09	0.86	< 0.37	2.2	< 0.38	1.2 J	< 0.38	NA	NA
	RW-15D (127-137)(020817)		2/8/2017	< 0.09	0.846/0.72	< 0.37	4.4	< 0.38	4.2	< 0.38	NA	NA
	RW-15D (127-137)(081717)		8/17/2017	< 0.09	0.982	< 0.37	5.3	< 0.38	4.7	< 0.38	NA	NA
	RW-15D (127-137)(083118)		8/31/2018	< 0.43	0.49	< 0.32	6.8	< 0.37	8.2	< 0.37	NA	NA
RW-16	RW-16 (052416)[2]	52-62'	5/24/2016	<1/<0.09	<0.42/<0.0735	<1/<0.13	NA	NA	NA	NA	NA	NA
	RW-16 (52-62)		8/16/2016	< 0.09	< 0.075	< 0.37	< 0.71	< 0.44	< 0.71	< 0.44	NA	NA
	RW-16 (020217)		2/2/2017	< 0.09	< 0.075/<0.22	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	RW-16 (081717)		8/17/2017	< 0.09	< 0.0765	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	RW-16 (082118)		8/21/2018	< 0.43	< 0.016	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
SC-01	SC-1	64.4-70.9'	10/5/2006	< 0.21		<1	< 1.5	< 2.6	1.7 B	< 2.6	NA	NA
	SC1(041107)		4/11/2007	1.4		1.6	< 1.5	6.3	< 1.5	< 2.8	NA	NA
	SC-1(071016)		10/16/2007	1.5		3.6	< 1.1	8.8	< 1.1	1.6 B	NA	NA
	DUP-01(080430) (SC-1)		4/30/2008	0.93 J		1	< 1.7	6.6	< 1.7	1.9 B	NA	NA
	SC-1(080430)		4/30/2008	1.1		0.9 J	< 1.7	5.4	< 1.7	< 1.4	NA	NA
	SC-1 (080917)		9/17/2008	0.81 J		<1	< 1.7	6.2	< 1.7	< 1.4	NA	NA
	SC-1(070909)		7/9/2009	0.94 J		0.64 J	< 2.4	7.2 J	< 2.4	< 3.0	NA	NA
	SC-1(102809)		10/28/2009	0.53 J		<1	< 2.4	9.9	< 2.4	< 1.7	NA	NA
	SC-1(060210)		6/2/2010	1.5		1.1	< 1.4	6.2	< 1.4	< 1.9	NA	NA
	SC-1(051811)		5/18/2011	0.63 J		0.39 J	< 0.92	5.6	< 0.92	1.5 J	NA	NA
	SC-1 (042712)		4/27/2012	1.2		1.2 J	< 0.97	9.4	< 0.97	< 1.7	NA	NA
	SC-1(111113)		11/11/2013	1.6		<1	< 1.5	8.6	< 1.5	< 2.4	NA	NA
	SC-1 (090514)		9/5/2014	56.0		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	SC-1 (100914)		10/9/2014	1.6		<1	< 2.6	2.5 B	< 2.6	< 1.3	NA	NA

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Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
			NJGWQS	1	0.4	5	3	5	3	5	3	3
	SC-1 (031915)		3/19/2015	150		<1	NA	NA	NA	NA	NA	NA
	SC-1 (042215)		4/22/2015	1.8		1.8	NA	NA	NA	NA	NA	NA
	SC-1(060215)		6/2/2015	1.6		1.1	NA	NA	NA	NA	NA	NA
	SC-1(080415)		8/4/2015	1.3	.39J	0.53 J	1.1 B	13	<0.84 B	2	NA	NA
	SC-1(121515)		12/15/2015	2.9	1.3	2.5	NA	NA	NA	NA	NA	NA
	SC-1(052616)[2]		5/26/2016	1.6/1.7	0.74/1.60	1.2/1.4	NA	NA	NA	NA	NA	NA
	SC-1(081916)		8/19/2016	1.8	0.905	2	< 0.71	7.9	< 0.71	< 0.44	NA	NA
	SC-1(081617)		8/16/2017	2	1.13	1.4	< 0.64	13.6	< 0.64	< 0.38	NA	NA
	SC-1(082418)		8/24/2018	1.6	0.45 B	1.3	< 0.77	5.7	< 0.77	< 0.37	NA	NA
	SC-2 (080505)		5/5/2008	< 0.26		<1	< 1.7	2.8 B	< 1.7	< 1.4	NA	NA
	SC-2 (080917)		9/17/2008	< 0.26		<1	2.1 B	< 1.4	< 1.7	< 1.4	NA	NA
	SC-2(063009)		6/30/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	SC-2(102009)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	SC-2(052510)		5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	SC-2(051611)		5/16/2011	< 0.26		<1	1.4 B	20.0	< 0.92	< 0.94	NA	NA
SC-02	SC-2 (041912)	47-67'	4/19/2012	< 0.22		<1	< 0.97	2.9 J	< 0.97	< 1.7	NA	NA
	SC-2 (111513)		11/15/2013	< 0.28 J		<1 J	< 1.5	< 4.0 B	< 1.5	< 2.4	NA	NA
	SC-2(091514)		9/15/2014	< 0.21		<1	< 3.0 B	< 1.3	3.1 J	< 1.3	NA	NA
	SC-2(081215)		8/12/2015	<0.2	<0.27	<1	2.1 B	0.58 J	4.6	<0.2	NA	NA
	SC-2(081716)		8/17/2016	< 0.09	< 0.0636	< 0.37	< 0.71	2	< 0.71	< 0.44	NA	NA
	SC-2(082217)		8/22/2017	< 0.09	< 0.0765	< 0.37	< 0.64	0.39 J	< 0.64	< 0.38	NA	NA
	SC-2(082318)		8/23/2018	< 0.43	0.29 B	< 0.32	< 0.77	4 B	< 0.77	< 0.37	NA	NA

Notes:

Results for 1,4-dioxane, benzene, chloroethane, lead, and arsenic are presented in this table. See Summary tables for full results.

Results are presented in µg/L unless otherwise noted.

[1] NJGWQS, New Jersey Groundwater Quality Standard NJAC7:9C March 2014

[2] Results represent split samples between Test America (without isotope dilution) and Alpha Analytical (with isotope dilution), respectively.

1,4-dioxane analyzed by Method 8270 Sim with Isotope Dilution as of August 2016.

Shaded values exceed NJGWQS.

*First two results via 8270 SIM-ID, second result outside of hold time. Third result is via Method 522 from Pace Analytical as part of isotope study. See Text.

** First result by 8270 SIM-ID, second result via Method 522 from Pace Analytical as part of isotope study.

< = not detected

B (inorganic) = estimated result is between the detection limit and quantification limit

B (organic) = analyte found in associated method blank

ft bgs = feet below ground surface

J = estimated result

NA = not analyzed or not available

R = rejected result

µg/L = micrograms per liter

Table 13B
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			GWQS[1]	1	0.4	5	3	5	3	5	3	3
CM SHAFT	CMSHAFT(50)(050712)	50'	5/7/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	CM-50 (091214)		9/12/2014	< 0.21		NA	< 2.6	< 3.8 B	< 2.6	< 1.3	NA	NA
	CM-50 (081415)		8/14/2015	<0.2	<0.27	<1	2.3 B	0.39 J	<0.5	<0.2	NA	NA
	CM-50 (082216)		8/22/2016	< 0.09	< 0.0735	< 0.37	< 0.71	0.47 J	< 0.71	< 0.44	NA	NA
	CM-50 (082117)		8/21/2017	< 0.09	0.143 J	< 0.37	< 0.64	< 0.38	< 0.64	< 0.38	NA	NA
	CM-50 (082318)		8/23/2018	< 0.43	0.34 B	< 0.32	< 0.77	0.42 J	< 0.77	< 0.37	NA	NA
	CMSHAFT(100)(050712)	100'	5/7/2012	< 0.22		<1	< 0.97	1.7 B	< 0.97	< 1.7	NA	NA
	CM-100(091814)		9/18/2014	< 0.21		<1	R	2.4 J	R	< 1.3	NA	NA
	CMSHAFT(100)(081715)		8/17/2015	<0.2	0.47J	<1	1.6 J	0.29 J	<0.5	<0.2	NA	NA
	CM-100(082216)		8/22/2016	< 0.09	< 0.0735	< 0.37	< 0.71	0.51 J	< 0.71	< 0.44	NA	NA
	CM-100(082117)		8/21/2017	< 0.09	0.142 J	< 0.37	0.81 J	1.9	< 0.64	< 0.38	NA	NA
	CM-100(082318)		8/23/2018	< 0.43	0.34 B	< 0.32	< 0.77	0.44 UB	< 0.77	< 0.37	NA	NA
	CM SHAFT (160)(050912)	160'	5/9/2012	< 0.22		<1	< 0.97	< 3.0	< 0.97	< 1.7	NA	NA
	CM-160(091814)		9/18/2014	< 0.21		<1	< 2.6	13.2 J	< 2.6	< 3.0 B	NA	NA
	CMSHAFT(160)(081715)		8/17/2015	<0.2	.054J	<1	1.7 J	7.8	<0.5	<0.2	NA	NA
	CM-160(082216)		8/22/2016	< 0.09	0.0786 J	< 0.37	< 0.71	163	< 0.71	< 0.44	NA	NA
	CM-160(020717)		2/7/2017	< 0.09	< 0.0765	< 0.37	< 0.64	36.3	< 0.64	< 0.38	NA	NA
	CM-160(082117)		8/21/2017	< 0.09	0.122 J	< 0.37	< 0.64	7.8	< 0.64	< 0.38	NA	NA
	CM-160(082318)		8/23/2018	< 0.43	0.33 B	< 0.32	< 0.77	3.4 B	< 0.77	< 0.37	NA	NA
	CM SHAFT (275)(050912)	275'	5/9/2012	< 0.22		<1	< 0.97	< 3.0	< 0.97	< 1.7	NA	NA
	CM-275(091914)		9/19/2014	< 0.21		<1	< 2.6	104	< 2.6	< 3.0 B	NA	NA
	CM-275 (081815)		8/18/2015	<0.2	<0.27	<1	3.2 B	91	0.54 J	<0.2	NA	NA
	CM-275(082216)		8/22/2016	< 0.09	0.163	< 0.37	0.94 J	192	< 0.71	< 0.44	NA	NA
	CM-275(020717)		2/7/2017	< 0.09	0.832	< 0.37	0.93 J	97	< 0.64	< 0.38	NA	NA
	CM-275(082217)		8/22/2017	< 0.09	0.235	< 0.37	< 0.64	14.5	< 0.64	< 0.38	NA	NA
	CM-275(082318)		8/23/2018	< 0.43	0.4 B	< 0.32	1.1 J	44.4 B	< 0.77	< 0.37	NA	NA
PM AIR SHAFT	PM AIR SHAFT-50(042312)	50'	4/23/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	PM AIRSHAFT-50(071112)		7/11/2012	< 0.24		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	PM AIRSHAFT-50(091614)		9/16/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	PM AIRSHAFT-50(042414)		4/24/2015	<0.24		<.5	NA	NA	NA	NA	NA	NA
	PMAIRSHAFT-50(060215)		6/2/2015	<0.20		<1	NA	NA	NA	NA	NA	NA
	PM AIRSHAFT-50(082115)		8/21/2015	<0.20	<0.27	<1	< 1.3 B	4.5	<0.5	0.82 J	NA	NA
	OB-2(082318)		8/23/2018	< 0.43	0.25 B	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
	PM AIRSHAFT-50(121715)		12/17/2015	<0.09	<0.053	<1	NA	NA	NA	NA	NA	NA
	PM AIRSHARFT-50(060116)[2]		6/1/2016	<1/<0.09	<0.40/<0.0735	<1/<0.13	NA	NA	NA	NA	NA	NA
	PM AIRSHAFT-50(082316)		8/23/2016	< 0.09	< 0.0735	< 0.37	< 0.64	1.7	< 0.64	0.44 J	NA	NA
	PM AIRSHAFT-50(020717)		2/7/2017	0.11 J	0.707	< 0.37	< 0.64	0.99 J	< 0.64	< 0.38	NA	NA
	PM AIRSHAFT-50(082317)		8/23/2017	< 0.09	< 0.075	< 0.37	< 0.64	0.88 J	< 0.64	< 0.38	NA	NA
	PM AIRSHAFT-50(082418)		8/24/2018	< 0.43	0.41 B	0.51 J	< 0.77	1.7	< 0.77	< 0.37	NA	NA
	PMPAS-180(080507)	180'	5/7/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	PM AIRSHAFT-180		9/18/2008	26.4		21.6	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	PM AIRSHAFT(180)		7/10/2009	7.4		34.9	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	PMAIR SHAFT-180		10/29/2009	0.60 J		0.39 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	PM AIRSHAFT 180		6/4/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	PM AIRSHAFT-180(052411)		5/24/2011	2.5		5.3	< 0.92	2.5 B	< 0.92	< 0.94	NA	NA
	PM AIR SHAFT-180(042312)		4/23/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	PM AIRSHAFT-180(071112)		7/11/2012	< 0.24		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	PM AIRSHAFT-180(071112) DUI		7/11/2012	< 0.24		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	PMAIRSHAFT-180(091614)		9/16/2014	6.6		25.2	< 2.6	13.3	< 2.6	1.5 B	NA	NA
	PMAIRSHAFT-180(042415)		4/24/2015	2.3		7.9	NA	NA	NA	NA	NA	NA
	PMAIRSHAFT-180(060315)		6/3/2015	5.4		14	NA	NA	NA	NA	NA	NA
	PM AIRSHAFT 180(081715)		8/17/2015	4.1	12	14	1.2 J	0.024	<0.5	<0.2	NA	NA
	PM AIRSHAFT 180(121815)		12/18/2015	7.1	5.76J	33	NA	NA	NA	NA	NA	NA
	OB-3(082218)		8/22/2018	< 0.43	< 0.017	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
	PM AIRSHAFT 180(060116)[2]		6/1/2016	6.4/5.6	5/18.2	48/20	NA	NA	NA	NA	NA	NA
	PM AIRSHAFT 180(082316)		8/23/2016	5.9	20.3/16.6*	44	< 0.64	131	< 0.64	< 0.38	NA	NA
	PM AIRSHAFT 180(020717)		2/7/2017	5.5	15.2/13	47	< 0.64	6.4	< 0.64	< 0.38	NA	NA
	PM AIRSHAFT 180(082317)		8/23/2017	6	18.7	15	< 0.64	9.8	< 0.64	0.51 J	NA	NA
	PM AIRSHAFT 180(082418)		8/24/2018	10	21	23	< 0.77	25.2	< 0.77	< 0.37	NA	NA

Table 13B
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2018
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062	Dissolved Arsenic (USEPA 7062
			GWQS[1]	1	0.4	5	3	5	3	5	3	3
	PMPAS-230(080507)		5/7/2008	31.8		21.1	< 1.7	6.4	< 1.7	5.4	NA	NA
	PM AIRSHAFT-230		9/18/2008	29.1		19	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	PM AIRSHAFT(230)		7/10/2009	7.6		34.9	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	PMAIR SHAFT-230		10/29/2009	31.2		21.3	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	PM AIRSHAFT 230		6/4/2010	31.0		15.9	1.8 B	< 1.9	< 1.4	< 1.9	NA	NA
	PM AIRSHAFT-230(052411)		5/24/2011	33.2		14	< 0.92	2.2 B	< 0.92	1.3 B	NA	NA
	PM AIR SHAFT-230(042412)		4/24/2012	< 0.22		<1	1.0 B	< 1.7	< 0.97	< 1.7	NA	NA
	M AIR SHAFT-230(042412) DU		4/24/2012	< 0.22		<1	< 0.97	1.9 B	< 0.97	< 1.7	NA	NA
	PM AIRSHAFT-230(071112)		7/11/2012	28.5		9.6	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	PMAIRSHAFT-230(091714)		9/17/2014	32.9		9.7	4.2	3.4 J	4.9	2.2 J	NA	NA
	PMAIRSHAFT-230(042415)	230'	4/24/2015	7.8		29.1	NA	NA	NA	NA	NA	NA
	PMAIRSHAFT-230(060315)		6/3/2015	25		8	NA	NA	NA	NA	NA	NA
	OB-4(082118)		8/21/2018	< 0.43	< 0.016	< 0.32	< 0.77	< 0.37	< 0.77	< 0.37	NA	NA
	PM AIRSHAFT-230(081815)		8/18/2015	25	140	7.7	3 B	980	0.58 J	<0.2	NA	NA
	PM AIRSHAFT-230(121815)		12/18/2015	26	31.1	8	NA	NA	NA	NA	NA	NA
	M AIR SHAFT-230(121815) DU		12/18/2015	25	21.8	7.1	NA	NA	NA	NA	NA	NA
	PM AIR SHAFT-230(060116)[2]		6/1/2016	25/31	15/144	23/8.5	NA	NA	NA	NA	NA	NA
	PM AIRSHAFT-230(082316)		8/23/2016	29	146/107*	17	< 0.64	8.2	< 0.64	< 0.38	NA	NA
	PM AIRSHAFT-230(020717)		2/7/2017	33	129/110J	24	11.6	3000	< 0.64	< 0.38	NA	NA
	PM AIRSHAFT-230(082317)		8/23/2017	33	144	6.4	3.5	203	< 0.64	< 0.38	NA	NA
	PM AIRSHAFT-230(082418)		8/24/2018	33	82 J	8.6	4.1	54.5	< 0.77	< 0.37	NA	NA

Notes:

Results for 1,4-dioxane, benzene, lead, and arsenic are presented in this table. See Summary tables for full results.

Results are presented in µg/L unless otherwise noted.

[1] NJGWQS, New Jersey Groundwater Quality Standard NJAC7:9C March 2014

[2] Results represent split samples between Test America (without isotope dilution) and Alpha Analytical (with isotope dilution), respectively.

1,4-dioxane analyzed by Method 8270 Sim with Isotope Dilution as of August 2016.

Shaded values exceed NJGWQS.

* First result by 8270 SIM-ID, second result via Method 522 from Pace Analytical as part of isotope study.

< = not detected

B (inorganic) = estimated result is between the detection limit and quantification limit

B (organic) = analyte found in associated method blank

ft bgs = feet below ground surface

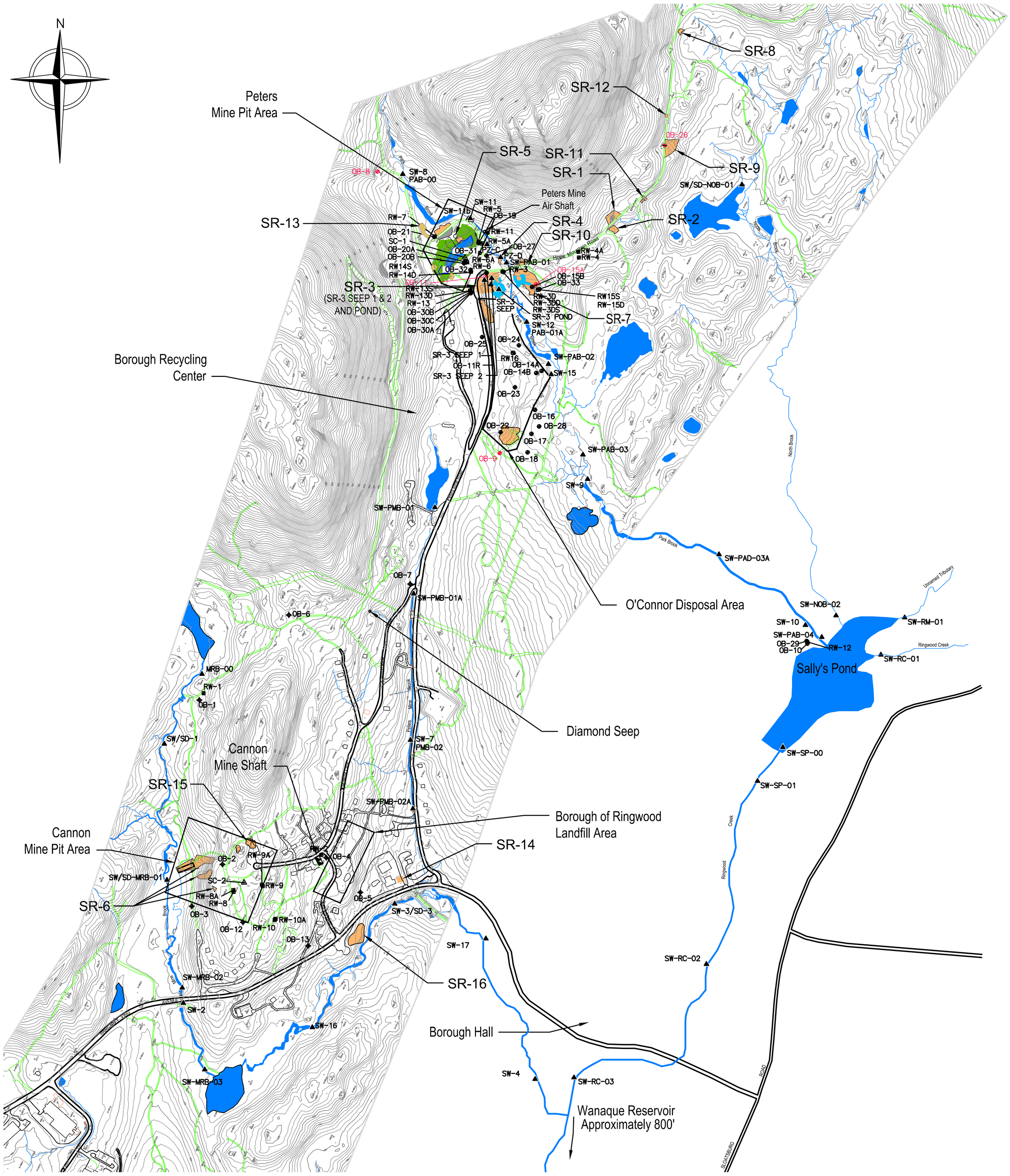
J = estimated result

NA = not analyzed or not available

R = rejected result

µg/L = micrograms per liter

ATTACHMENT A
FIGURES



NOTES:

1. MAP SOURCE: "SITE PLAN DEPICITING TOPOGRAPHIC FEATURES," RINGWOOD MINES/LANDFILL SITE, SITE RELATED GROUNDWATER REMEDIAL INVESTIGATION REPORT, MAP LATEST REVISION DATE 11/24/14.
2. EXISTING CONTOURS DEPICT TOPOGRAPHY PRIOR TO REMOVAL ACTIVITIES.

LEGEND

- BEDROCK WELL
- DEEP BEDROCK WELL
- DIRECTIONAL WELL
- UNCONSOLIDATED WELL
- MONITORING WELL DAMAGED OR NOT AVAILABLE FOR SAMPLING
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL, DRUMS, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL AND PAINT SLUDGE
- APPROXIMATE LIMITS OF SURFICIAL SOIL SCRAPING
- HISTORICAL FILL AREA SURROUNDING PETERS MINE PIT (AREA 1)
- INDICATES VERNAL CONDITIONS TYPICALLY OBSERVED IN THE SPRING AND FALL SEASONS
- WATER BODY

- SW-2 ▲ SURFACE WATER SAMPLE LOCATION
- SW-MRB-01 ▲ SURFACE WATER SAMPLE LOCATION FROM MINE BROOK
- SW-PMB-01 ▲ SURFACE WATER SAMPLE LOCATION FROM PETERS MINE BROOK
- SW-NOB-01 ▲ SURFACE WATER SAMPLE LOCATION FROM NORTH BROOK
- SW-PAB-01 ▲ SURFACE WATER SAMPLE LOCATION FROM PARK BROOK
- SW-RC-01 ▲ SURFACE WATER SAMPLE LOCATION FROM RINGWOOD CREEK
- SW-RM-01 ▲ SURFACE WATER SAMPLE LOCATION FROM UNNAMED TRIBUTARY
- SW-SP-00 ▲ SURFACE WATER SAMPLE LOCATION FROM SALLY'S POND

- TRAIL/ DIRT ROAD
- STREAM
- INFERRED STREAM

400 200 0 400 800 1200

SCALE: 1"=400'

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE 10/18

DRAWN BY _____ CHECKED BY _____

DESIGNED BY _____ APPROVED BY _____

cornerstone
A TETRA TECH COMPANY

RINGWOOD MINES/LANDFILL SUPERFUND SITE
RINGWOOD, NEW JERSEY
ANNUAL GROUNDWATER SURFACE WATER & MINE WATER SAMPLING

SAMPLING LOCATION PLAN

SHEET NO. 1

PROJECT NO. 180361

File: X:\PROJECTS\FORD MOTOR COMPANY\149802 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCRD1-S-F-01-SITE PLAN TOPO.DWG Layout: FIGURE 01 User: sam.waizenegger Nov 16, 2018 - 11:40am

SR-13
SR-5
PETERS MINE PIT AREA
PETERS MINE POND
PETERS MINE POND GUAGE
SC-1
SW-11
PETERS MINE AIR SHAFT
OB-19
RW-5
RW-5A
RW-11D
RW-11S
OB-20B
OB-20A
RW-6
RW-6A
OB-32
RW-14D
RW-14S
OB-31
OB-27
RW-13D
RW-13S
OB-30B
OB-30A
OB-30C
SR-3
SR-3 SEEP 1
SR-3 SEEP 2
OB-11R
O'CONNOR DISPOSAL AREA
SUPERFUND DEPTH
CB.2
CB.1
OB-25
SR-3 POND
SR-4
HISTORIC MINE STRUCTURE
SW-PAB-01
RW-3DS
RW-3DD
RW-3D
RW-3S
SR-10
SW-PAB-01A
OB-15B
(508.64)
RW-15D
RW-15S
OB-33
(510.78)
SR-7
SW-12/PAB-01A
RW-16
OB-24
(496.91)
(533.80)
(518.69)
(520.41)
(516.85)
(518.29)
(517.39)
(516.20)
(515.96)
532
530
528
526
524
522
520
518
516
514
512
510
508
506
504
502
500
498
496

N

LEGEND:

- 530 — EXISTING CONTOUR
- LIMIT OF SURFACE WATER
- OVERHEAD UTILITY LINES
- PROPERTY BOUNDARY
- TREE LINE
- EXISTING DIRT TRAIL/ROAD
- STABILIZED ACCESS ROAD
- OB-19 — OVERBURDEN MONITORING WELL
- STAFF GAUGE
- RW-5 — BEDROCK MONITORING WELL
- VS-1 / RSH-1 — MINE SHAFTS
- SC-1 — DIRECTIONAL MONITORING WELL
- 601 — BLOCK
- 12 — LOT
- 505 — GROUNDWATER ELEVATION CONTOUR – OVERBURDEN (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION OF OVERBURDEN
- (512.70) — GROUNDWATER/SURFACE WATER ELEVATION (FEET MSL)
- SW-11 — SURFACE WATER – SAMPLE LOCATION
- SW-PMB-01 — SURFACE WATER – SAMPLE LOCATION FROM PETERS MINE BROOK
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL, DRUMS, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL AND PAINT SLUDGE
- APPROXIMATE LIMITS OF SURFICIAL SOIL SCRAPING
- HISTORICAL FILL AREA SURROUNDING PETERS MINE POND (AREA 1)
- INDICATES VERNAL CONDITIONS TYPICALLY OBSERVED IN THE SPRING AND FALL SEASONS
- WATER BODY
- STREAM

NOTES:

1. RW-3S REPRESENTS THE 77-87 FOOT INTERVAL AND RW-3D IS A MULTIPORT WELL.
2. RW-13S REPRESENTS THE 71-91 FOOT INTERVAL AND RW-13D IS A MULTIPORT WELL.

0 60' 120'
GRAPHIC SCALE

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RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER,
AND MINE WATER MONITORING REPORT
OVERBURDEN WELL LOCATIONS AND OVERBURDEN GROUNDWATER CONTOURS IN THE PETERS MINE PIT - AUGUST 2018

SHEET NO. **2**
PROJECT NO. 180361

1" 1/2" 0" 1"

File: X:\PROJECTS\FORD MOTOR COMPANY\14MRO - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\EMC801-S-F-02-08 WELL PETERS MINE PIT.DWG Layout: FIGURE 02 User: aom.wolzenegger Nov 16, 2018 - 12:40pm

SR-13
SR-5
SR-3
SR-4
SR-10
SR-7
PETERS MINE PIT AREA
PETERS MINE POND
PETERS MINE AIR SHAFT
O'CONNOR DISPOSAL AREA
SHERIDAN DRIVE
HISTORICAL MINE STRUCTURE
CB.1
CB.2
OB-21 RW-7 (536.57)
OB-20B OB-20A RW-6 RW-6A (521.03)
OB-19 RW-5 (521.09) RW-5A
RW-11D RW-11S
OB-32 OB-31
RW-14D RW-14S (521.31)
RW-13D (520.57) RW-13S
OB-30B OB-30A OB-30C
OB-11R
RW-3D RW-3DD RW-3DS RW-3S (515.01)
OB-27
OB-25
OB-15B
(509.64) RW-15D RW-15S (509.03) OB-33
RW-16 (502.27)
OB-24
536 534 532 530 528 526 524 522 520 518 516 514 512 510
563.2 561.5 531.9 522.3X 532.2 531.2 527.8 527.1 530.4 506.4 505.3 503.5 517.1 525.7 566.1 594.6 543.9 536.2 513.5

LEGEND:

- 530 — EXISTING CONTOUR
- LIMIT OF SURFACE WATER
- OVERHEAD UTILITY LINES
- EXISTING DIRT TRAIL/ROAD
- STABILIZED ACCESS ROAD
- OB-27 — OVERBURDEN MONITORING WELL
- RW-5 — BEDROCK MONITORING WELL
- SC-1 — DIRECTIONAL MONITORING WELL
- 601 — BLOCK
- 12 — LOT
- MSL — MEAN SEA LEVEL
- FT — FEET
- 520 — GROUNDWATER ELEVATION CONTOUR – SHALLOW BEDROCK
- GROUNDWATER FLOW DIRECTION OF SHALLOW BEDROCK INTERVAL 100' (2-FT CONTOUR INTERVAL)
- (509.61) — GROUNDWATER ELEVATION (FEET MSL)
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL, DRUMS, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL AND PAINT SLUDGE
- APPROXIMATE LIMITS OF SURFICIAL SOIL SCRAPING
- HISTORICAL FILL AREA SURROUNDING PETERS MINE POND (AREA 1)
- INDICATES VERNAL CONDITIONS TYPICALLY OBSERVED IN THE SPRING AND FALL SEASONS
- WATER BODY
- STREAM

NOTES:

1. BEDROCK CONTOURS BASED ON INTERVAL 75 TO 125 FEET BELOW GROUND SURFACE (405–440 FT MSL).
2. RW–5A AND RW–6A NOT USED TO CONTOUR BEDROCK.
3. RW–3S REPRESENTS THE 77–87 FOOT INTERVAL AND RW–3D IS A MULTIPORT WELL.
4. RW–13S REPRESENTS THE 71–91 FOOT INTERVAL AND RW–13D IS A MULTIPORT WELL.

0 60' 120'
GRAPHIC SCALE

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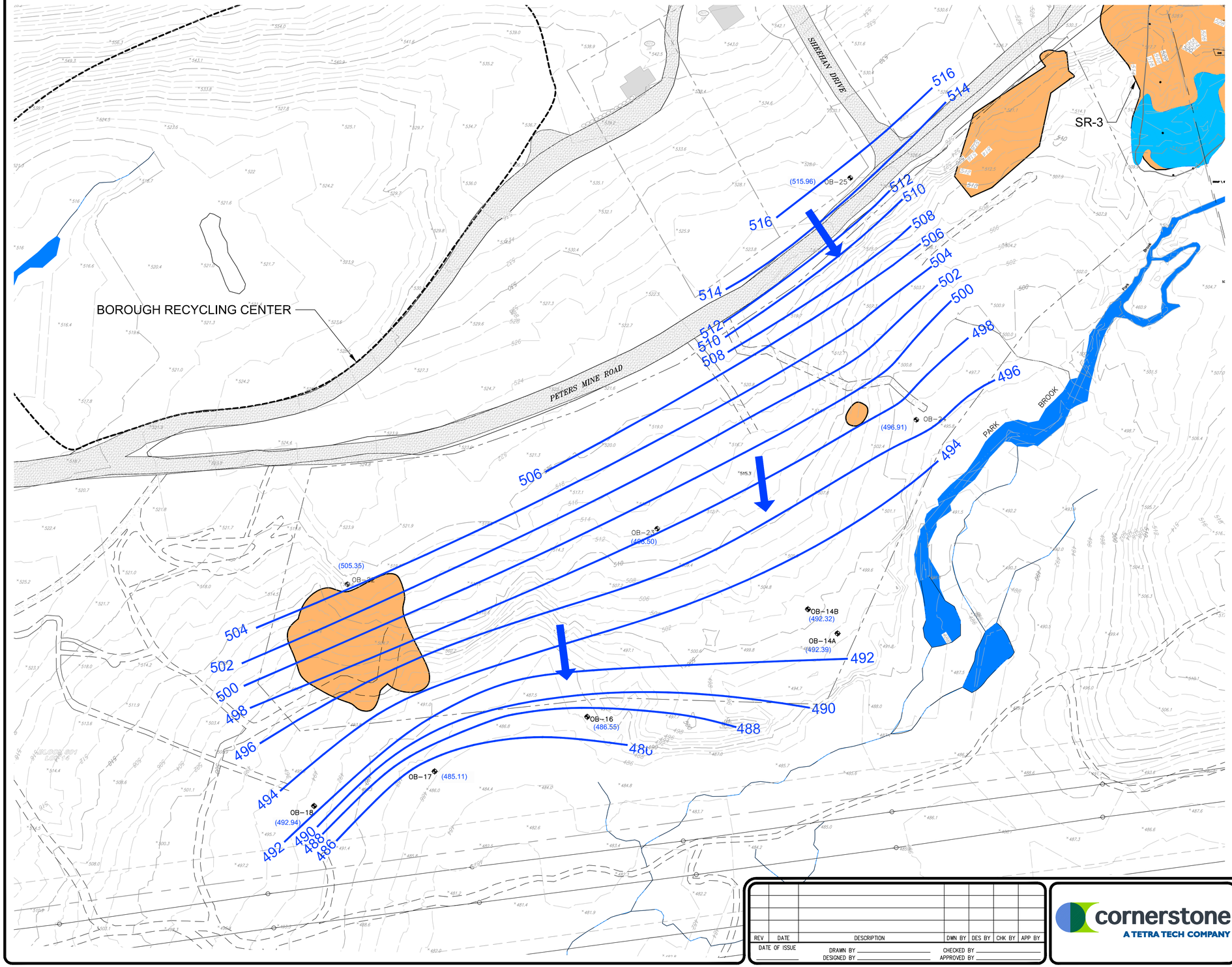
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT
WELL LOCATIONS AND SHALLOW BEDROCK POTENTIOMETRIC SURFACE CONTOURS IN THE PETERS MINE PIT - AUGUST 2018

SHEET NO. **3**
PROJECT NO. 180361

1" 1/2" 0" 1"

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 – RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMC801-S-F-03-SHALLOW BEDROCK PETERS MINE PIT.dwg Layout: FIGURE 03 User: sam.wilzenegger Nov 16, 2018 – 1:03pm



LEGEND:

- 530 — EXISTING CONTOUR
- 514 — GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- (484.90) GROUNDWATER LEVEL
- LIMIT OF SURFACE WATER
- OVERHEAD UTILITY LINES
- PROPERTY BOUNDARY
- OUTLINE OF O'CONNOR DISPOSAL AREA
- EXISTING DIRT ROAD/TRAIL
- OB–16 OVERBURDEN MONITORING WELL LOCATION
- OCDA O'CONNOR DISPOSAL AREA
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- INDICATES VERNAL CONDITIONS TYPICALLY OBSERVED IN THE SPRING AND FALL SEASONS
- WATER BODY
- STREAM

0 30 60 90
SCALE IN FEET

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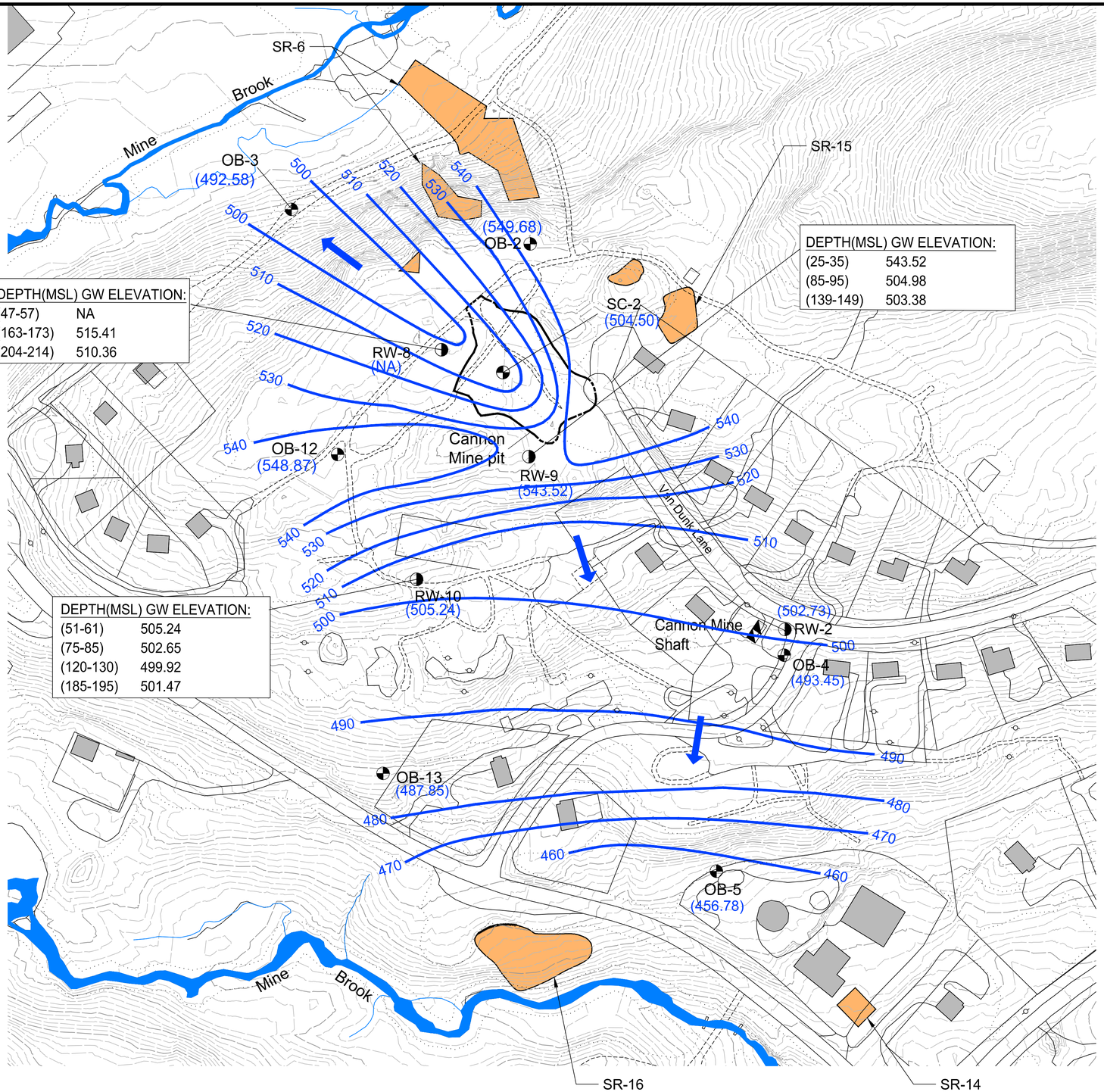
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER,
AND MINE WATER MONITORING REPORT
WELL LOCATIONS AND OVERBURDEN GROUNDWATER ELEVATION CONTOURS IN THE FORMER OCDA - AUGUST 2018

SHEET NO. **4**

PROJECT NO. 180361

1" 1/2" 0" 1"

File: X:\PROJECTS\FORD MOTOR COMPANY\1400\2 – RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\1M2801-S-F-04-GW OCDA.dwg Layout: FIGURE 04 User: sam.wilzenegger Nov 16, 2018 – 11:09am



LEGEND:

- RESIDENCE
- TRAILS
- ROADWAYS
- WATERWAYS, BROOKS
- GROUND SURFACE ELEVATION CONTOUR
- RW-10 (498.79) — BEDROCK MONITORING WELL WITH GROUNDWATER ELEVATION
- 490 — GROUNDWATER ELEVATION CONTOUR (SHALLOW BEDROCK)
- GROUNDWATER FLOW DIRECTION OF SHALLOW BEDROCK INTERVAL (FT. MSL.) (10-FT CONTOUR INTERVAL)
- FT. MSL. – FEET ABOVE MEAN SEA LEVEL
- APPROXIMATE LIMITS OF PAINT SLUDGE REMOVAL AREAS
- WATER BODY
- STREAM

0 100 200 300
SCALE IN FEET

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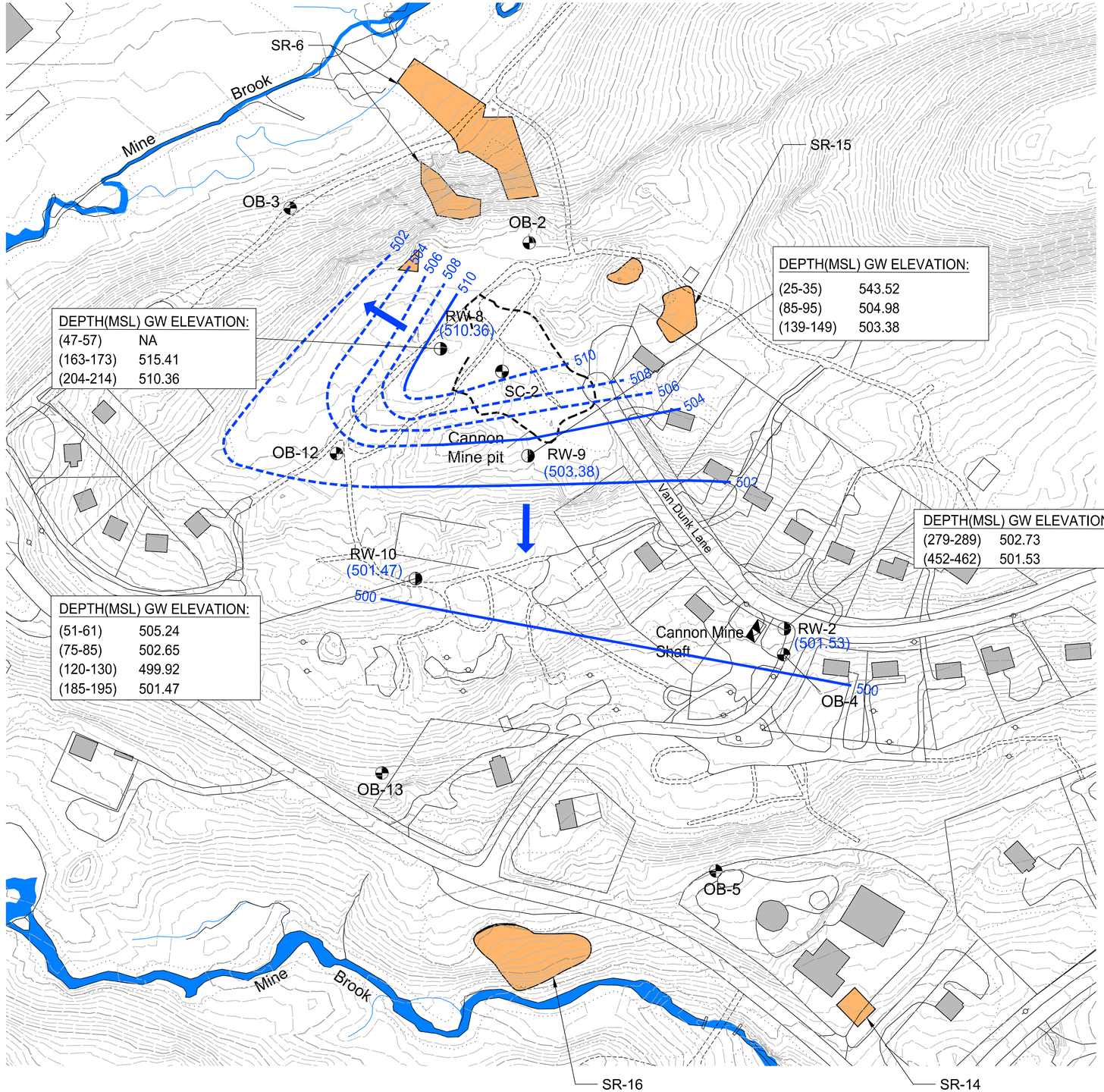
RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER,
AND MINE WATER MONITORING REPORT
WELL LOCATIONS AND SHALLOW BEDROCK
POTENTIOMETRIC SURFACE CONTOURS IN THE CMP - AUGUST 2018

SHEET NO. **5**
PROJECT NO. 180361

1" 1/2" 0" 1"

File: K:\PROJECTS\FORD MOTOR COMPANY\140922 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCR01-S-F-05-SHALLOW BEDROCK CMP.dwg Layout: SHEET 05 User: sam.wilzenegger Nov 16, 2018 - 1:15pm



LEGEND:

- RESIDENCE
- TRAILS
- ROADWAYS
- WATERWAYS, BROOKS
- GROUND SURFACE ELEVATION CONTOUR
- RW-10 (498.79) — BEDROCK MONITORING WELL WITH GROUNDWATER ELEVATION
- 490 — GROUNDWATER ELEVATION CONTOUR (SHALLOW BEDROCK)
- GROUNDWATER FLOW DIRECTION OF DEEP BEDROCK INTERVAL (FT. MSL.) (10-FT CONTOUR INTERVAL)
- FT. MSL. – FEET ABOVE MEAN SEA LEVEL
- APPROXIMATE LIMITS OF PAINT SLUDGE REMOVAL AREAS
- WATER BODY
- STREAM

0 100 200 300
SCALE IN FEET

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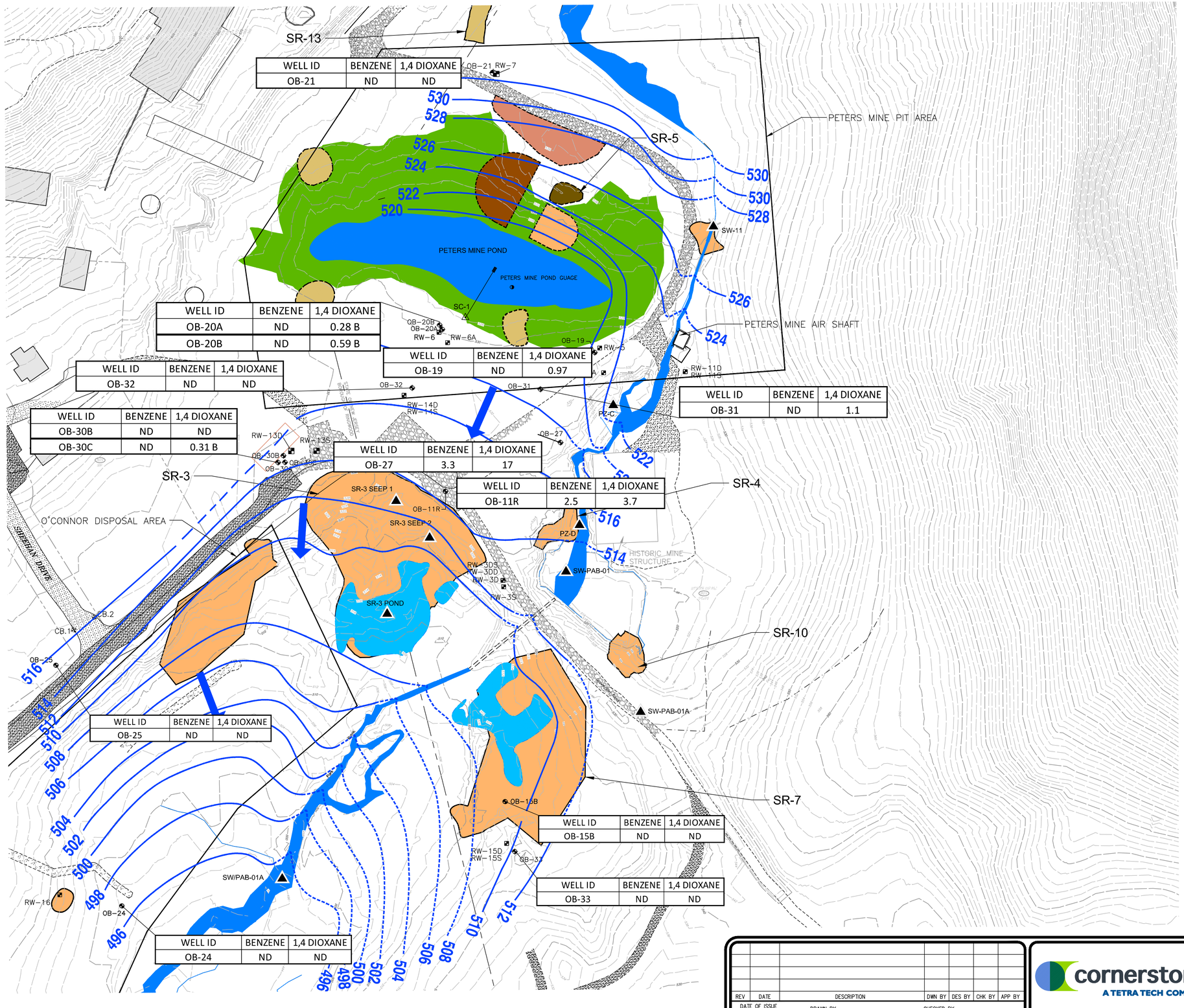
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT
WELL LOCATIONS AND DEEP BEDROCK POTENTIOMETRIC SURFACE CONTOURS IN THE CMP - AUGUST 2018

SHEET NO. **6**
PROJECT NO. 180361

File: X:\PROJECTS\FORD MOTOR COMPANY\140602 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCR01-S-F-06-DEEP BEDROCK CMP.dwg Layout: FIGURE 06 User: sam.widenegger Nov 16, 2018 - 1:20pm
1" 1/2" 0" 1"



WELL ID	BENZENE	1,4 DIOXANE
OB-21	ND	ND

WELL ID	BENZENE	1,4 DIOXANE
OB-20A	ND	0.28 B
OB-20B	ND	0.59 B

WELL ID	BENZENE	1,4 DIOXANE
OB-19	ND	0.97

WELL ID	BENZENE	1,4 DIOXANE
OB-32	ND	ND

WELL ID	BENZENE	1,4 DIOXANE
OB-31	ND	1.1

WELL ID	BENZENE	1,4 DIOXANE
OB-30B	ND	ND
OB-30C	ND	0.31 B

WELL ID	BENZENE	1,4 DIOXANE
OB-27	3.3	17

WELL ID	BENZENE	1,4 DIOXANE
OB-11R	2.5	3.7

WELL ID	BENZENE	1,4 DIOXANE
OB-25	ND	ND

WELL ID	BENZENE	1,4 DIOXANE
OB-15B	ND	ND

WELL ID	BENZENE	1,4 DIOXANE
OB-33	ND	ND

WELL ID	BENZENE	1,4 DIOXANE
OB-24	ND	ND

LEGEND:

- EXISTING CONTOUR
- LIMIT OF SURFACE WATER
- OVERHEAD UTILITY LINES
- PROPERTY BOUNDARY
- TREE LINE
- EXISTING DIRT TRAIL/ROAD
- STABILIZED ACCESS ROAD
- OB–19 — OVERBURDEN MONITORING WELL
- STAFF GAUGE
- RW–5 — BEDROCK MONITORING WELL
- VS–1 / RSH–1 — MINE SHAFTS
- SC-1 — DIRECTIONAL MONITORING WELL
- 601 — BLOCK
- 12 — LOT
- 505 — GROUNDWATER ELEVATION CONTOUR – OVERBURDEN (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION OF OVERBURDEN
- SW/SD-11 — SURFACE WATER AND SEDIMENT – SAMPLE LOCATION/ STAFF GUAGE
- SW/SD-PMB-01 — SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM PETERS MINE BROOK/ STAFF GUAGE
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL, DRUMS, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL AND PAINT SLUDGE
- APPROXIMATE LIMITS OF SURFICIAL SOIL SCRAPING
- HISTORICAL FILL AREA SURROUNDING PETERS MINE POND (AREA 1)
- INDICATES VERNAL CONDITIONS TYPICALLY OBSERVED IN THE SPRING AND FALL SEASONS
- WATER BODY
- STREAM

NOTES:

1. RW–3S REPRESENTS THE 77–87 FOOT INTERVAL AND RW–3D IS A MULTIPORT WELL.
2. RW–13S REPRESENTS THE 71–91 FOOT INTERVAL AND RW–13D IS A MULTIPORT WELL.
3. ALL RESULTS IN ug/l.
4. ND = NOT DETECTED.
5. "J" = ESTIMATED VALUE.
6. "B" = DETECTED IN FIELD BLANK.

0 60' 120'
GRAPHIC SCALE

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RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT
OVERBURDEN GROUNDWATER BENZENE AND 1,4 DIOXANE CONCENTRATIONS IN THE PETERS MINE PIT - AUGUST 2018

SHEET NO. **7**
PROJECT NO. 180361

File: X:\PROJECTS\FORD MOTOR COMPANY\1 WORCO - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\1NOV2801-S-F-07-BENZENE DIOXANE CONC OB PMP.DWG Layout: FIGURE 07 User: sam.wilzenegger Nov 16, 2018 - 1:43pm

WELL ID	BENZENE	1,4 DIOXANE
RW-7	ND	ND

WELL ID	BENZENE	1,4 DIOXANE
SC-1	1.6	0.45 B

WELL ID	BENZENE	1,4 DIOXANE
RW-13(71-91)	ND/ND	0.5 B/0.45 B
RW-13(100-120)	ND	ND
RW-13(150-170)	ND	ND

WELL ID	BENZENE	1,4 DIOXANE
RW-6	1.3	2.1
RW-6A	0.9 J	3.1

WELL ID	BENZENE	1,4 DIOXANE
RW-16	ND	ND

WELL ID	BENZENE	1,4 DIOXANE
RW-3(77-87)	ND	14
RW-3DS(155-160)	ND	12
RW-3DD(175-180)	ND	12

WELL ID	BENZENE	1,4 DIOXANE
RW-15S	ND/ND	ND/ND
RW-15D	ND	0.49

ID	BENZENE	1,4 DIOXANE
PM AIR SHAFT 50	ND	0.41 B
PM AIR SHAFT 180	10	21
PM AIR SHAFT 230	33	82 J

WELL ID	BENZENE	1,4 DIOXANE
RW-11S(236-241)	ND	0.9
11D(262-267)	11	41

WELL ID	BENZENE	1,4 DIOXANE
RW-5	ND	6.8
RW-5A	ND	ND

WELL ID	BENZENE	1,4 DIOXANE
RW-14S	ND	ND
RW-14D	ND	0.36

LEGEND:

- EXISTING CONTOUR
- LIMIT OF SURFACE WATER
- OVERHEAD UTILITY LINES
- EXISTING DIRT TRAIL/ROAD
- STABILIZED ACCESS ROAD
- OB–27 OVERBURDEN MONITORING WELL
- RW–5 BEDROCK MONITORING WELL
- SC-1 DIRECTIONAL MONITORING WELL
- 601 BLOCK
- 12 LOT
- MSL MEAN SEA LEVEL
- FT FEET
- 520 GROUNDWATER ELEVATION CONTOUR – SHALLOW BEDROCK
- GROUNDWATER FLOW DIRECTION OF SHALLOW BEDROCK INTERVAL 100' (2–FT CONTOUR INTERVAL)
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL, DRUMS, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL AND PAINT SLUDGE
- APPROXIMATE LIMITS OF SURFICIAL SOIL SCRAPING
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- WATER BODY
- STREAM

NOTES:

1. BEDROCK CONTOURS BASED ON INTERVAL 75 TO 125 FEET BELOW GROUND SURFACE (405–440 FT MSL).
2. RW–5A AND RW–6A NOT USED TO CONTOUR BEDROCK.
3. RW–3S REPRESENTS THE 77–87 FOOT INTERVAL AND RW–3D IS A MULTIPORT WELL.
4. RW–13S REPRESENTS THE 71–91 FOOT INTERVAL AND RW–13D IS A MULTIPORT WELL.
5. ALL RESULTS IN ug/l.
6. ND = NOT DETECTED.
7. "J" = ESTIMATED VALUE.
8. "B" = DETECTED IN FIELD BLANK.

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GRAPHIC SCALE

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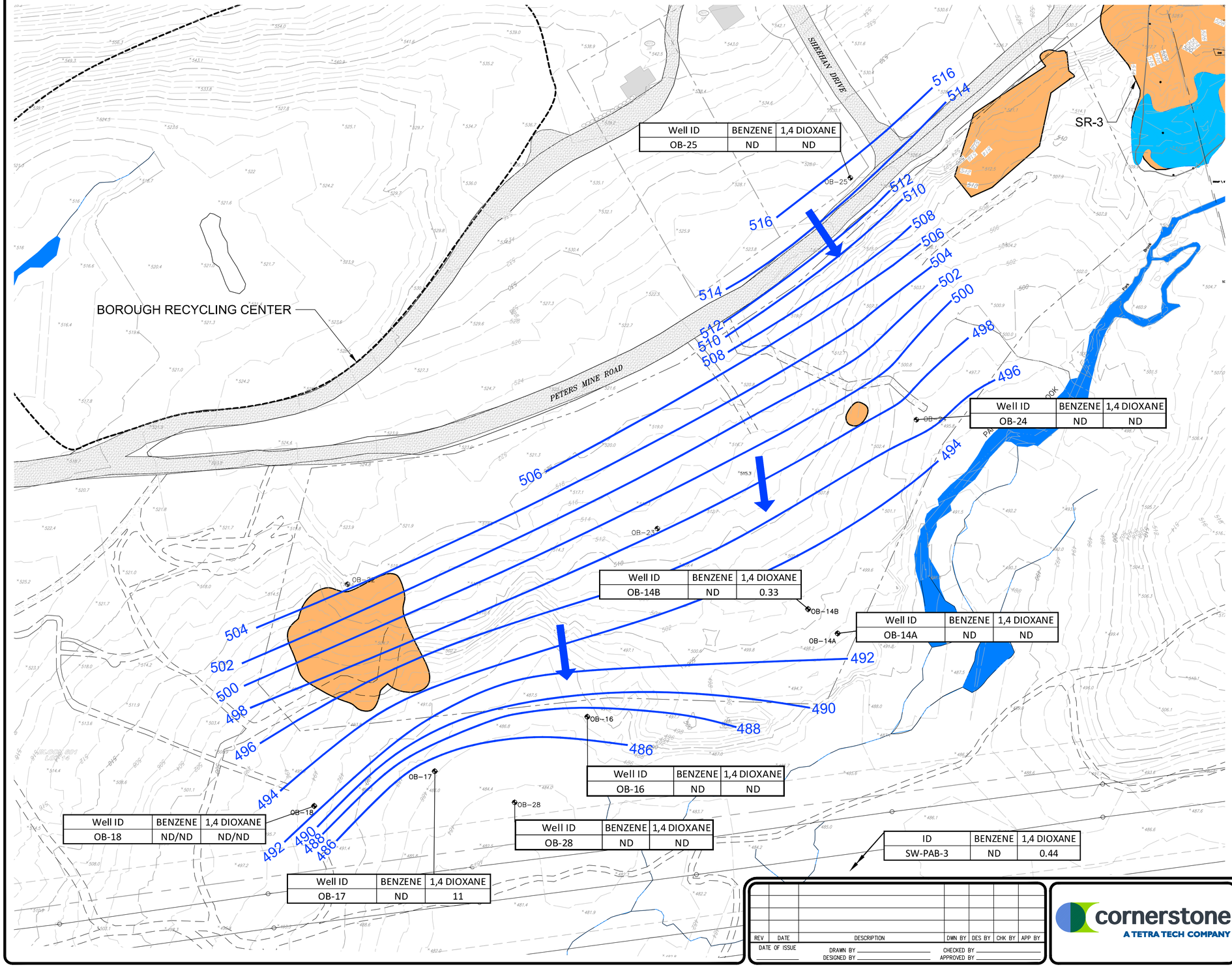
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT
BEDROCK GROUNDWATER AND MINE WATER BENZENE AND 1,4 DIOXANE CONCENTRATIONS IN THE PETERS MINE PIT - AUGUST 2018

SHEET NO. **8**
PROJECT NO. 180361

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 – RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\YM2021-S-F-08-BENZENE DIOXANE CONC SHALLOW PMP.dwg Layout: FIGURE 08 User: sorn.wolzenegger Nov 16, 2018 – 1:49pm



LEGEND:

- EXISTING CONTOUR
- GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- (484.90) GROUNDWATER LEVEL
- LIMIT OF SURFACE WATER
- OVERHEAD UTILITY LINES
- PROPERTY BOUNDARY
- OUTLINE OF O'CONNOR DISPOSAL AREA
- EXISTING DIRT ROAD/TRAIL
- OB–16 OVERBURDEN MONITORING WELL LOCATION
- OCDA O'CONNOR DISPOSAL AREA
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
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- WATER BODY
- STREAM

NOTES:

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0 30 60 90
SCALE IN FEET

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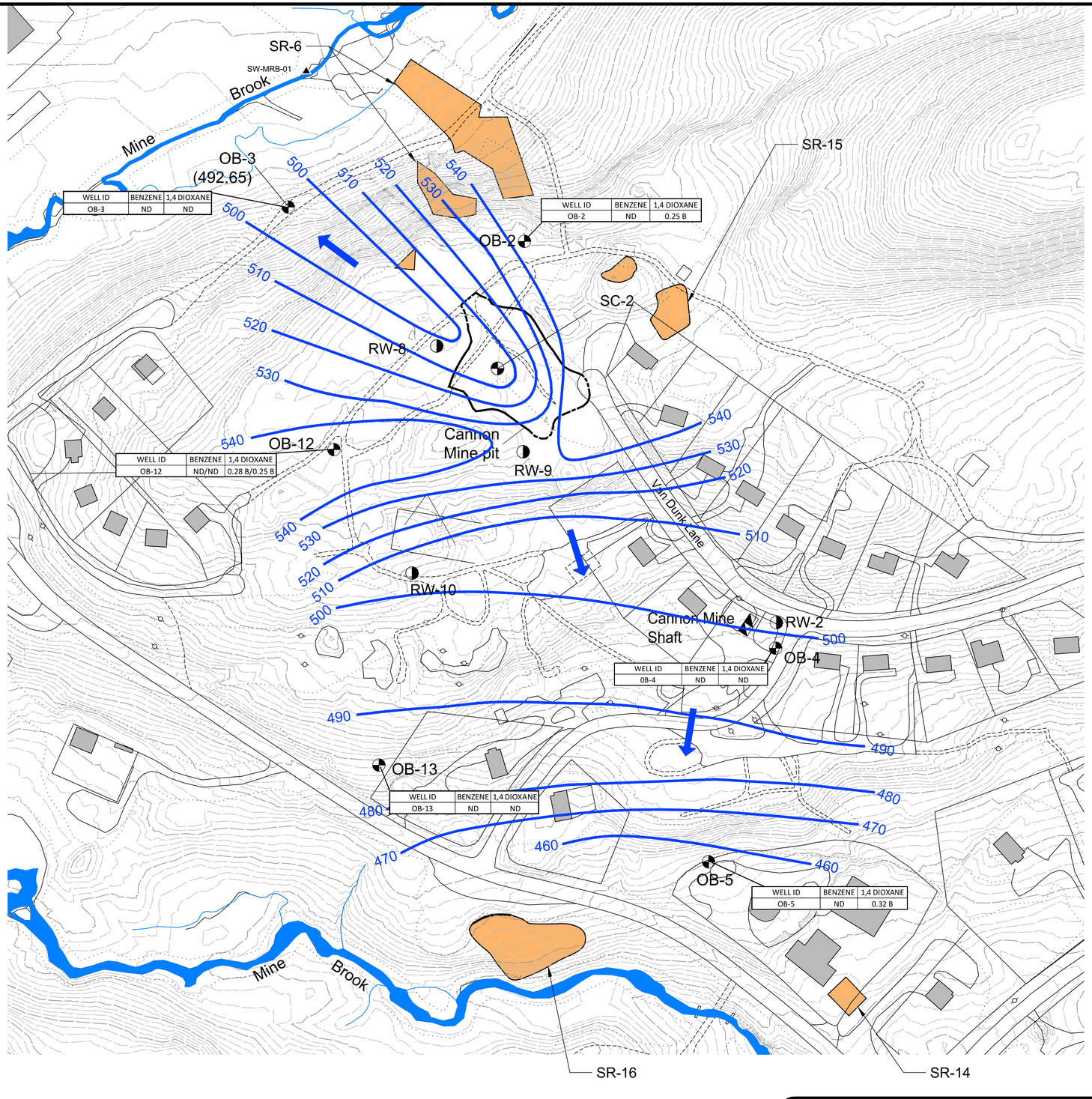
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT
BENZENE AND 1,4 DIOXANE CONCENTRATIONS IN THE FORMER OCDA - AUGUST 2018

SHEET NO. **9**
PROJECT NO. 180361

1" 1/2" 0" 1"

File: X:\PROJECTS\FORD MOTOR COMPANY\140602 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\MCSR01-S-F-09-BENZENE DIOXINE GW CONC OCDA.dwg Layout: FIGURE_09 User: sam.wolzenegar Nov 16, 2018 – 1:53pm



LEGEND:

- RESIDENCE
- TRAILS
- ROADWAYS
- WATERWAYS, BROOKS
- GROUND SURFACE ELEVATION CONTOUR
- RW-10 — BEDROCK MONITORING WELL
- 490 — GROUNDWATER ELEVATION CONTOUR (SHALLOW BEDROCK)
- GROUNDWATER FLOW DIRECTION OF SHALLOW BEDROCK BEDROCK INTERVAL (FT. MSL.) (10-FT CONTOUR INTERVAL)
- FT. MSL. — FEET ABOVE MEAN SEA LEVEL
- APPROXIMATE LIMITS OF PAINT SLUDGE REMOVAL AREAS
- WATER BODY
- STREAM

NOTES:

1. ALL RESULTS IN ug/l.
2. ND = NOT DETECTED.
3. "J" = ESTIMATED VALUE.
4. "B" = DETECTED IN FIELD BLANK.

0 100 200 300
SCALE IN FEET

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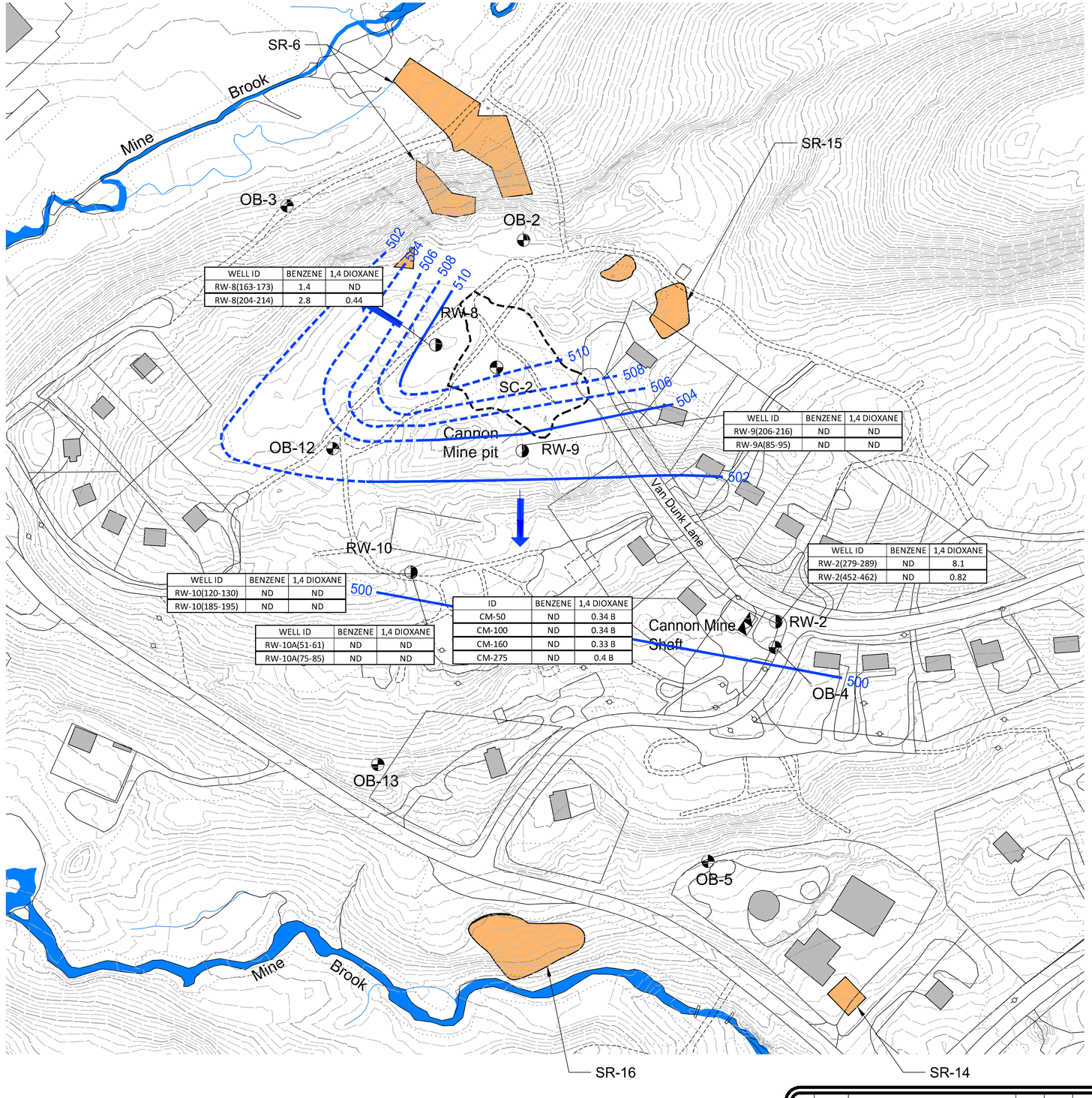
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT
SHALLOW BEDROCK BENZENE AND 1,4 DIOXANE CONCENTRATIONS IN THE CMP - AUGUST 2018

SHEET NO. **10**
PROJECT NO. 180361

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCR01-5-F-10-BENZENE DIOXANE SHALLOW CONC CMP.dwg Layout: SHEET 10 User: sam.wolzenegor Nov 16, 2018 - 2:02pm



WELL ID	BENZENE	1,4 DIOXANE
RW-8(163-173)	1.4	ND
RW-8(204-214)	2.8	0.44

WELL ID	BENZENE	1,4 DIOXANE
RW-9(206-216)	ND	ND
RW-9A(85-95)	ND	ND

WELL ID	BENZENE	1,4 DIOXANE
RW-2(279-289)	ND	8.1
RW-2(452-462)	ND	0.82

WELL ID	BENZENE	1,4 DIOXANE
RW-10(120-130)	ND	ND
RW-10(185-195)	ND	ND

ID	BENZENE	1,4 DIOXANE
CM-50	ND	0.34 B
CM-100	ND	0.34 B
CM-160	ND	0.33 B
CM-275	ND	0.4 B

WELL ID	BENZENE	1,4 DIOXANE
RW-10A(51-61)	ND	ND
RW-10A(75-85)	ND	ND

N

LEGEND:

- RESIDENCE
- TRAILS
- ROADWAYS
- WATERWAYS, BROOKS
- GROUND SURFACE ELEVATION CONTOUR
- RW-10 — BEDROCK MONITORING WELL
- 490 — GROUNDWATER ELEVATION CONTOUR (SHALLOW BEDROCK)
- GROUNDWATER FLOW DIRECTION OF DEEP BEDROCK INTERVAL (FT. MSL.) (10-FT CONTOUR INTERVAL)
- FT. MSL. — FEET ABOVE MEAN SEA LEVEL
- APPROXIMATE LIMITS OF PAINT SLUDGE REMOVAL AREAS
- WATER BODY
- STREAM

NOTES:

1. ALL RESULTS IN ug/l.
2. ND = NOT DETECTED.
3. "J" = ESTIMATED VALUE.
4. "B" = DETECTED IN FIELD BLANK.

0 100 200 300
SCALE IN FEET

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RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
ANNUAL GROUNDWATER, SURFACE WATER, AND MINE WATER MONITORING REPORT
DEEP BEDROCK GROUNDWATER AND MINE WATER BENZENE AND 1,4 DIOXANE CONCENTRATIONS IN THE CMP - AUGUST 2018

SHEET NO. **11**
PROJECT NO. 180361

1" 1/2" 0" 1"

File: X:\PROJECTS\FORD MOTOR COMPANY\140602 - RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\DWG\R01-5-F-11-BENZENE DIOXANE DEEP CONC CMP.dwg Layout: SHEET 11 User: sam.wolzenegger Nov 16, 2018 - 2:07pm

N

Peters Mine Pit Area

ID	BENZENE	1,4 DIOXANE
PMP-PAB-00	ND	0.41

SR-13

ID	BENZENE	1,4 DIOXANE
PMP-POND	ND	ND

SR-5

ID	BENZENE	1,4 DIOXANE
SW-11	ND/ND	ND/ND

SR-12 Hope Pit

SR-11

SR-1

Peters Mine Air Shaft

SR-4

SR-10

SR-3 (SR-3 SEEP 1 & 2 AND POND)

ID	BENZENE	1,4 DIOXANE
SR-3 SEEP-1	0.53 J	1.5

ID	BENZENE	1,4 DIOXANE
SR-3 SEEP-2	0.72 J	1.6

ID	BENZENE	1,4 DIOXANE
SW-PMB-01	ND/ND	ND/ND

ID	BENZENE	1,4 DIOXANE
SW-PMB-01A	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-PMB-02	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-PMB-02A	ND	ND

Borough Recycling Center

Diamond Seep

Cannon Mine Shaft

SR-15

Cannon Mine Pit Area

ID	BENZENE	1,4 DIOXANE
SW-MRB-01	ND	ND

SR-6

ID	BENZENE	1,4 DIOXANE
SW-MRB-00	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-MRB-02	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-MRB-03	ND	ND

SR-14

Borough of Ringwood Landfill Area

SR-16

Borough Hall

O'Connor Disposal Area

ID	BENZENE	1,4 DIOXANE
SW-PAB-04	ND	0.4

ID	BENZENE	1,4 DIOXANE
SW-PAB-03A	ND	0.42

ID	BENZENE	1,4 DIOXANE
SW-NOB-02	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-03	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-17	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-04	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-RC-03	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-RC-02	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-RM-01	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-RC-01	ND	ND

Sally's Pond

ID	BENZENE	1,4 DIOXANE
SW-SP-00	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-SP-01	ND	ND

WANAQUE RESERVOIR APPROXIMATELY 800'

ID	BENZENE	1,4 DIOXANE
SR-3 POND	ND	1.4

ID	BENZENE	1,4 DIOXANE
SW-PAB-01A	ND	0.62

ID	BENZENE	1,4 DIOXANE
SW-PAB-02	ND	0.52

ID	BENZENE	1,4 DIOXANE
SW-PAB-01	ND	ND

ID	BENZENE	1,4 DIOXANE
SW-PAB-03	ND	0.44

ID	BENZENE	1,4 DIOXANE
SW-NOB-01	ND	ND

SR-8

SR-9

SR-2

SR-7

Hope Shaft

SW-8 PAB-00

SW-11b

SW-1

SW-2

SW-3/SD-3

SW-4

SW-5

SW-7 PMB-02

SW-8 PAB-00

SW-9

SW-10

SW-15

SW-16

SW-17

SW-PAB-01

SW-PAB-02

SW-PAB-03

SW-PAB-03A

SW-PMB-01

SW-PMB-01A

SW-PMB-02A

SW/SP-01

SW-RC-01

SW-RC-02

SW-RC-03

SW-RM-01

SW-SP-00

SW/SD-12 PAB-01A

SW-NOB-01

SW-NOB-02

SW-PAB-04

SW-MRB-00

SW-MRB-01

SW-MRB-02

SW-MRB-03

SW-PMB-01

SW-PMB-01A

SW-PMB-02

SW-PMB-02A

SW-SP-00

SW-SP-01

SW-RC-01

SW-RC-02

SW-RC-03

SW-RM-01

SW/SD-3

SW-PAB-01

SW-PAB-02

SW-PAB-03

SW-PAB-03A

SW-PAB-04

SW-NOB-01

SW-NOB-02

SR-3 POND

SW/SD-12 PAB-01A

SR-3 SEEP

SR-3 SEEP 1

SR-3 SEEP 2

OB-1 OB-2 OB-3 OB-4 OB-5 OB-6 OB-7 OB-8 OB-9 OB-10 OB-11R OB-12 OB-13 OB-14A OB-14B OB-15A OB-15B OB-16 OB-17 OB-18 OB-19 OB-20A OB-20B OB-21 OB-22 OB-23 OB-24 OB-25 OB-26 OB-27 OB-28 OB-29 OB-30A OB-30B OB-30C OB-31 OB-32 OB-33

RW-1 RW-2 RW-3 RW-4 RW-4A RW-5 RW-5A RW-6 RW-6A RW-7 RW-8 RW-8A RW-9 RW-9A RW-10 RW-10A RW-11 RW-12 RW-13 RW-13D RW-13S RW-14D RW-14S RW-16 RW-3D RW-3DD RW-3DS

SC-1 SC-2

PZ-C PZ-D

Park Brook

North Brook

Mine Brook

Peters Mine Brook

Diamond Seep Brook

Cannon Mine Brook

Hope Mountain Road

Ramapo Valley Road

Bloomingdale Avenue

ROAD

LEGEND

- BEDROCK WELL
- DEEP BEDROCK WELL
- DIRECTIONAL WELL
- UNCONSOLIDATED WELL
- MONITORING WELL DAMAGED OR NOT AVAILABLE FOR SAMPLING
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL, DRUMS, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL AND PAINT SLUDGE
- APPROXIMATE LIMITS OF SURFICIAL SOIL SCRAPING
- HISTORICAL FILL AREA SURROUNDING PETERS MINE PIT (AREA 1)
- INDICATES VERNAL CONDITIONS TYPICALLY OBSERVED IN THE SPRING AND FALL SEASONS
- WATER BODY
- SW-2 ▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION
- SW-MRB-01 ▲ SURFACE WATER – SAMPLE LOCATION FROM MINE BROOK
- SW-PMB-01 ▲ SURFACE WATER – SAMPLE LOCATION FROM PETERS MINE BROOK
- SW-NOB-01 ▲ SURFACE WATER – SAMPLE LOCATION FROM NORTH BROOK
- SW-PAB-01 ▲ SURFACE WATER – SAMPLE LOCATION FROM PARK BROOK
- TRAIL/ DIRT ROAD
- STREAM
- INFERRED STREAM

NOTES:

1. MAP SOURCE: "SITE PLAN DEPICITING TOPOGRAPHIC FEATURES," RINGWOOD MINES/LANDFILL SITE, SITE RELATED GROUNDWATER REMEDIAL INVESTIGATION REPORT, MAP LATEST REVISION DATE 11/24/14.
2. THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DOES NOT HAVE A SURFACE WATER QUALITY STANDARD FOR 1,4–DIOXANE.
3. THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION GROUNDWATER QUALITY STANDARD FOR 1,4–DIOXANE IS 0.4 ug/l, EFFECTIVE 11/25/15.
4. ALL RESULTS IN UG/L.
5. ND = NOT DETECTED.
6. "J" = ESTIMATED VALUE.

400 200 0 400 800 1200

SCALE: 1"=400'

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RINGWOOD MINES/LANDFILL SUPERFUND SITE
RINGWOOD, NEW JERSEY
ANNUAL GROUNDWATER SURFACE WATER & MINE WATER SAMPLING
SURFACE WATER BENZENE, 1,4-DIOXANE CONCENTRATIONS
AUGUST 2018

SHEET NO. 12

PROJECT NO. 180361

File: X:\PROJECTS\FORD MOTOR COMPANY\140802 – RINGWOOD MINES_LANDFILL SUPERFUND SITE_Project Drawings\Annual Report Maps\FMCR01-S-F-12-BENZENE DIOXANE SURF WATER CONC.dwg Layout: FIGURE 12 User: sam.waizenegger Nov 16, 2018 – 2:42pm

ATTACHMENT B

FIELD SAMPLING DATA SHEETS (ON COMPACT DISC)

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-2
Date:	8/23/18	Sampled By:	DW		
Sampling Time:	14:20	Recorded By:	DW		
Weather:	Sunny, hot 83 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUV2J

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low flow bladder pump**		
Casing Diameter:	6"	Screen Interval:	8' to 42'		
Total Depth:	42.35	Pump intake depth:	40'		
Depth to Water:	17.50				
Water Column:	24.85	Total Volume Purged:	3.38 gallons		
Gallons/Foot:	1.470	Pump on:	13:40	Off:	
Gallons in Well:	36.53				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:40	0	320	0.00	0.0	171.0	6.06	0.121	14.38	17.45	7.58	
13:45	5	320	0.42	0.00	178.0	6.05	0.121	14.00	17.50	6.78	
13:50	10	320	0.85	0.00	186.0	6.09	0.119	13.50	17.48	6.56	
13:55	15	320	1.27	0.00	187.0	6.07	0.119	13.00	17.49	6.54	
14:00	20	320	1.69	0.00	188.0	6.05	0.119	12.62	17.48	6.50	
14:05	25	320	2.11	0.00	190.0	6.06	0.119	12.34	17.48	6.45	
14:10	30	320	2.54	0.00	194.0	6.04	0.117	12.40	17.48	6.40	
14:15	35	320	2.96	0.00	195.0	6.05	0.117	12.45	17.48	6.40	
14:20	40	320	3.38	0.00	197.0	6.05	0.117	12.51	17.48	6.41	

OBSERVATIONS DURING SAMPLING

Well Condition:	good	Purge Water Disposal:	CONTAINED
Color:	clear	Turbidity(qualitative):	clear
Odor:	none	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-3
Date:	8/22/18	Sampled By:	RJL		
Sampling Time:	10:00	Recorded By:	RJL		
Weather:	Sunny 76 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	RT7P5PW4

PURGING INFORMATION

Casing Material:	Steel	Purge Method:	**Low - Flow Bladder Pump**
Casing Diameter:	6"	Screen Interval:	9' to 24'
Total Depth:	23.45	Pump intake depth:	22'
Depth to Water:	2.39		
Water Column:	21.06	Total Volume Purged:	1.85 gallons
Gallons/Foot:	1.470	Pump on:	9:35 Off: 10:15
Gallons in Well:	30.96		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:35	0	260	0.00	79.1	164.0	6.43	0.115	16.88	2.40	3.64	
9:40	5	280	0.37	77.80	201.0	5.98	0.110	15.12	3.04	5.44	
9:45	10	280	0.74	44.10	208.0	5.93	0.107	15.05	3.34	7.08	
9:50	15	280	1.11	28.80	212.0	5.91	0.106	14.89	3.34	6.73	
9:55	20	280	1.48	27.70	216.0	5.91	0.106	14.77	3.35	6.75	
10:00	25	280	1.85	26.60	218.0	5.91	0.105	14.70	3.35	6.68	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	CONTAINED
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	None

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-4
Date:	8/21/18	Sampled By:	RJL, EB		
Sampling Time:	16:35	Recorded By:	RJL, EB		
Weather:	Cloudy 80 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	Rt7P5PW4

PURGING INFORMATION

Casing Material:	Steel	Purge Method:	**Low-Flow- Bladder Pump**		
Casing Diameter:	6"	Screen Interval:	28 to 61		
Total Depth:	60.45	Pump intake depth:	45		
Depth to Water:	17.30				
Water Column:	43.15	Total Volume Purged:	1.9 gallons		
Gallons/Foot:	1.470	Pump on:	16:00	Off:	16:45
Gallons in Well:	63.43				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
16:05	0	240	0.00	5.2	-3.0	6.61	0.874	16.86	17.30	2.52	
16:10	5	240	0.32	0.00	-28.0	6.62	0.878	15.69	17.45	1.13	
16:15	10	240	0.63	0.00	-37.0	6.61	0.881	15.46	17.55	0.82	
16:20	15	240	0.95	0.00	-44.0	6.61	0.884	15.33	17.65	0.62	
16:25	20	240	1.27	0.00	-49.0	6.61	0.884	15.39	17.80	0.49	
16:30	25	240	1.59	0.00	-51.0	6.62	0.885	15.27	17.90	0.40	
16:35	30	240	1.90	0.00	-55.0	6.62	0.886	15.32	17.92	0.32	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	CONTAINED
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	None

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-5
Date:	8/23/18	Sampled By:	DW		
Sampling Time:	10:20	Recorded By:	DW		
Weather:	Sunny 80 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUV2J

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Low-Flow-Bladder Pump**		
Casing Diameter:	6"	Screen Interval:	18' to 63'		
Total Depth:	63.31	Pump intake depth:	50'		
Depth to Water:	2.00				
Water Column:	61.31	Total Volume Purged:	3.38 gallons		
Gallons/Foot:	1.470	Pump on:	9:40	Off:	
Gallons in Well:	90.13				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:40	0	320	0.00	10.0	-51.0	6.58	0.783	15.13	2.00	2.98	
9:45	5	320	0.42	2.00	-51.0	6.53	0.786	14.84	2.30	2.84	
9:50	10	320	0.85	2.30	-49.0	6.52	0.787	14.75	2.35	2.74	
9:55	15	320	1.27	0.00	-52.0	6.55	0.784	14.74	2.38	2.37	
10:00	20	320	1.69	0.00	-51.0	6.52	0.784	14.76	2.40	2.35	
10:05	25	320	2.11	0.00	-51.0	6.52	0.783	14.74	2.42	2.30	
10:10	30	320	2.54	0.00	-51.0	6.52	0.782	14.78	2.43	2.23	
10:15	35	320	2.96	0.00	-52.0	6.53	0.780	14.81	2.42	2.23	
10:20	40	320	3.38	0.00	-53.0	6.54	0.777	14.85	2.43	2.20	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	CONTAINED
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	None

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-6
Date:	8/21/18	Sampled By:	RJL, EB		
Sampling Time:	15:15:00 PM	Recorded By:	RJL, EB		
Weather:	Sunny 85 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	RT7P5PW4

PURGING INFORMATION

Casing Material:	Stainless Steel	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	6"	Screen Interval:	10' to 36'		
Total Depth:	34.20	Pump intake depth:	33'		
Depth to Water:	6.48				
Water Column:	27.72	Total Volume Purged:	2.85 gallons		
Gallons/Foot:	1.470	Pump on:	14:30	Off:	15:30
Gallons in Well:	40.75				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:30	0	240	0.00	231.0	5.0	6.57	0.189	16.53	6.45	2.61	
14:35	5	240	0.32	350.00	-1.0	6.18	0.185	15.17	6.81	1.07	
14:40	10	240	0.63	426.00	12.0	6.12	0.182	16.12	6.91	0.74	
14:45	15	240	0.95	413.00	18.0	6.10	0.180	14.90	6.93	0.54	
14:50	20	240	1.27	247.00	22.0	6.10	0.179	14.91	6.98	0.42	
14:55	25	240	1.59	63.70	25.0	6.10	0.178	14.78	7.00	0.32	
15:00	30	240	1.90	35.80	26.0	6.08	0.178	14.77	7.01	0.25	
15:05	35	240	2.22	28.90	28.0	6.08	0.177	14.69	7.04	0.19	
15:10	40	240	2.54	26.80	28.0	6.07	0.177	14.68	7.05	0.15	
15:15	45	240	2.85	25.90	29.0	6.07	0.177	14.69	7.05	0.14	

OBSERVATIONS DURING SAMPLING

Well Condition:	Brocken locking tab	Purge Water Disposal:	CONTAINED
Color:	Turbid-Red/brown color, then clear	Turbidity(qualitative):	turbid, then clear
Odor:	none	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	007	Well ID:	OB-7
Date:	8/21/18	Sampled By:	RJL, EB		
Sampling Time:	12:50	Recorded By:	RJL, EB		
Weather:	Sunny 85 F	Replicate/Split:	MS/MSD		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	RT7P5PW4

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow Bladder Pump**		
Casing Diameter:	4"	Screen Interval:	14' to 42'		
Total Depth:	43.10	Pump intake depth:	30'		
Depth to Water:	4.84				
Water Column:	38.26	Total Volume Purged:	2.38 gallons		
Gallons/Foot:	0.650	Pump on:	12:05	Off:	13:10
Gallons in Well:	24.87				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
12:05	0	200	0.00	99.0	19.0	6.99	0.609	16.30	4.91	2.14	
12:10	5	200	0.26	21.20	-11.0	6.87	0.608	14.33	4.97	0.40	
12:15	10	200	0.53	22.40	-12.0	6.86	0.609	14.30	5.02	0.30	
12:20	15	200	0.79	14.40	-16.0	6.85	0.608	14.07	5.06	0.18	
12:25	20	200	1.06	15.30	-17.0	6.84	0.608	14.09	5.08	0.08	
12:30	25	200	1.32	13.60	-19.0	6.84	0.609	14.00	5.10	0.08	
12:35	30	200	1.59	10.60	-22.0	6.84	0.609	14.02	5.10	0.05	
12:40	35	200	1.85	8.90	-23.0	6.85	0.608	14.25	5.10	0.02	
12:45	40	200	2.11	11.00	-25.0	6.85	0.609	14.07	5.11	0.00	
12:50	45	200	2.38	7.30	-26.0	6.86	0.609	14.09	5.11	0.01	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	clear
Odor:	No odor	Other (OVA, HNU,etc.):	None

Cornerstone
Groundwater Sampling Form

Project Number:	170101	Task:	007	Well ID:	OB-8
Date:		Sampled By:	NA		
Sampling Time:		Recorded By:	NA		
Weather:		Replicate/Split:	NA		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE 013626	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:		Purge Method:	
Casing Diameter:		Screen Interval:	
Total Depth:		Pump intake depth:	
Depth to Water:			
Water Column:		Total Volume Purged:	
Gallons/Foot:		Pump on:	Off:
Gallons in Well:			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
		Well not sampled - obstruction in well									

OBSERVATIONS DURING SAMPLING

Well Condition:		Purge Water Disposal:	
Color:		Turbidity(qualitative):	
Odor:		Other (OVA, HNU,etc.):	

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-10
Date:	8/22/18	Sampled By:	RJL		
Sampling Time:	14:30	Recorded By:	RJL		
Weather:	Sunny 80 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	RT7P5PW4

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder Pump**		
Casing Diameter:	4"	Screen Interval:	10' to 20'		
Total Depth:	21.10	Pump intake depth:	15'		
Depth to Water:	6.37				
Water Column:	14.73	Total Volume Purged:	3.7 gallons		
Gallons/Foot:	0.650	Pump on:	13:52	Off:	14:38
Gallons in Well:	9.57				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:55	0	400	0.00	0.0	243.0	6.35	0.127	19.64	6.41	7.52	
14:00	5	400	0.53	0.00	238.0	6.37	0.124	13.96	6.41	3.46	
14:05	10	400	1.06	0.00	237.0	6.38	0.124	13.21	6.41	3.25	
14:10	15	400	1.59	0.00	236.0	6.38	0.124	13.19	6.41	3.04	
14:15	20	400	2.11	0.00	235.0	6.38	0.125	13.05	6.41	3.03	
14:20	25	400	2.64	0.00	234.0	6.37	0.124	13.32	6.41	2.90	
14:25	30	400	3.17	0.00	233.0	6.37	0.124	13.13	6.41	2.88	
14:30	35	400	3.70	0.00	233.0	6.37	0.124	13.33	6.41	2.88	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-11R
Date:	8/22/18	Sampled By:	JG, EB		
Sampling Time:	14:10	Recorded By:	JG, EB		
Weather:	Sunny 80 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	PF9RNCK8

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder Pump**		
Casing Diameter:	2"	Screen Interval:	25' to 40'		
Total Depth:	38.55	Pump intake depth:	32'		
Depth to Water:	16.78				
Water Column:	21.77	Total Volume Purged:	2.22 gallons		
Gallons/Foot:	0.160	Pump on:	13:20	Off:	14:30
Gallons in Well:	3.48				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:30	0	240	0.00	47.7	-99.0	6.54	0.484	16.98	16.89	5.27	
13:35	5	240	0.32	35.80	-103.0	6.57	0.461	18.23	16.90	3.70	
13:40	10	240	0.63	20.70	-103.0	6.57	0.462	18.10	16.90	3.19	
13:45	15	240	0.95	13.40	-103.0	6.52	0.461	18.02	16.90	2.76	
13:50	20	240	1.27	13.20	-106.0	6.57	0.460	18.00	16.92	2.52	
13:55	25	240	1.59	12.40	-104.0	6.66	0.464	17.78	16.92	2.18	
14:00	30	240	1.90	10.20	-108.0	6.59	0.465	17.71	16.92	1.80	
14:05	35	240	2.22	9.80	-104.0	6.54	0.464	17.70	16.92	1.76	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-12
Date:	8/22/17	Sampled By:	DW		
Sampling Time:	11:50	Recorded By:	DW		
Weather:	Sunny 85 F	Replicate/Split:	DUP-02-082318		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUV2J

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	6"	Screen Interval:	9' to 40'		
Total Depth:	39.75	Pump intake depth:	20'		
Depth to Water:	8.90				
Water Column:	30.85	Total Volume Purged:	4.23 gallons		
Gallons/Foot:	1.470	Pump on:	11:00	Off:	
Gallons in Well:	45.35				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:00	0	320	0.00	0.0	178.0	5.84	0.071	14.15	8.85	6.67	
11:05	5	320	0.42	0.0	185.0	5.86	0.074	14.00	8.90	6.54	
11:10	10	320	0.85	0.0	184.0	5.80	0.080	13.72	8.89	6.43	
11:15	15	320	1.27	0.0	183.0	5.73	0.083	13.50	8.90	6.42	
11:20	20	320	1.69	0.0	187.0	5.69	0.079	13.10	8.90	6.39	
11:25	25	320	2.11	0.0	190.0	5.66	0.078	12.81	8.90	6.36	
11:30	30	320	2.54	0.0	192.0	5.64	0.075	12.56	8.90	6.30	
11:35	35	320	2.96	0.0	195.0	5.65	0.076	12.50	8.90	6.28	
11:40	40	320	3.38	0.0	198.0	5.64	0.075	12.43	8.90	6.25	
11:45	45	320	3.80	0.0	200.0	5.65	0.075	12.38	8.90	6.24	
11:50	50	320	4.23	0.0	205.0	5.65	0.074	12.36	8.90	6.26	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-13
Date:	8/22/18	Sampled By:	RJL		
Sampling Time:	12:00	Recorded By:	RJL		
Weather:	Cloudy 80 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	RT7P5PW4

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Low Flow Bladdder Pump**		
Casing Diameter:	6"	Screen Interval:	8' to 30'		
Total Depth:	33.03	Pump intake depth:	28'		
Depth to Water:	12.26				
Water Column:	20.77	Total Volume Purged:	2.59 gallons		
Gallons/Foot:	1.470	Pump on:	11:22	Off:	12:13
Gallons in Well:	30.53				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:25	0	280	0.00	0.0	243.0	5.9	0.088	14.37	12.36	9.57	
11:30	5	280	0.37	0.00	245.0	5.85	0.086	13.08	12.42	7.17	
11:35	10	280	0.74	0.00	247.0	5.83	0.086	12.80	12.48	6.49	
11:40	15	280	1.11	0.00	248.0	5.84	0.086	12.94	12.52	6.35	
11:45	20	280	1.48	0.00	247.0	5.84	0.085	12.86	12.53	6.16	
11:50	25	280	1.85	0.00	249.0	5.85	0.085	12.89	12.57	6.02	
11:55	30	280	2.22	0.00	249.0	5.84	0.085	12.78	12.59	6.09	
12:00	35	280	2.59	0.00	250.0	5.86	0.085	12.84	12.61	6.06	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180631	Task:	006	Well ID:	OB-14A
Date:	8/21/18	Sampled By:	JG		
Sampling Time:	14:45	Recorded By:	JG		
Weather:	Partly Sunny 80 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow Bladder Pump**		
Casing Diameter:	4"	Screen Interval:	4' to 14'		
Total Depth:	16.00	Pump intake depth:	12'		
Depth to Water:	9.01				
Water Column:	6.99	Total Volume Purged:	1.5 gallons		
Gallons/Foot:	0.650	Pump on:	14:15	Off:	15:00
Gallons in Well:	4.54				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:15	0	240	0.00	58.6	-54.0	6.36	0.727	15.91	9.17	2.84	
14:20	5	200	0.26	24.9	-56.0	6.36	0.726	15.43	9.45	1.97	
14:25	10	160	0.42	6.5	-56.0	6.34	0.725	15.00	9.77	1.47	
14:30	15	160	0.63	4.4	-55.0	6.35	0.723	15.89	9.95	1.32	
14:35	20	160	0.85	5.9	-53.0	6.35	0.720	14.78	10.32	0.98	
14:40	25	160	1.06	7.2	-49.0	6.35	0.714	14.79	10.59	0.80	
14:45	30	160	1.27	6.8	-49.0	6.35	0.709	14.77	10.72	0.71	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-14B
Date:	8/21/18	Sampled By:	JG		
Sampling Time:	15:50	Recorded By:	JG		
Weather:	Sunny 78 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow bladder pump**
Casing Diameter:	4"	Screen Interval:	25' to 35'
Total Depth:	37.30	Pump intake depth:	30'
Depth to Water:	11.79		
Water Column:	25.51	Total Volume Purged:	2.22 gallons
Gallons/Foot:	0.650	Pump on:	3:36 Off: 16:00
Gallons in Well:	16.58		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:15	0	240	0.00	25.4	-61.0	6.73	0.658	15.63	11.88	3.46	
15:20	5	240	0.32	14.20	-40.0	6.90	0.731	14.17	12.07	1.81	
15:25	10	240	0.63	12.00	-31.0	6.92	0.752	13.76	12.29	1.21	
15:30	15	240	0.95	7.70	-30.0	6.93	0.763	13.65	12.53	0.92	
15:35	20	240	1.27	13.40	-31.0	6.94	0.763	13.64	12.61	0.74	
15:40	25	240	1.59	12.00	-32.0	6.95	0.762	13.60	12.72	0.60	
15:45	30	240	1.90	9.80	-32.0	6.95	0.762	13.60	12.80	0.51	
15:50	35	240	2.22	9.00	-32.0	6.95	0.762	13.57	12.94	0.38	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-15B
Date:	8/22/18	Sampled By:	DW		
Sampling Time:	12:15	Recorded By:	DW		
Weather:	Sunny 73 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUV2J

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	4"	Screen Interval:	25' to 35'		
Total Depth:	31.20	Pump intake depth:	33'		
Depth to Water:	2.30				
Water Column:	28.90	Total Volume Purged:	3.80 gallons		
Gallons/Foot:	0.650	Pump on:	11:30	Off:	
Gallons in Well:	18.79				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:30	0	320	0.00	33.0	1.5	7.33	0.169	14.30	2.30	0.65	
11:35	5	320	0.42	27.10	-101.0	8.10	0.173	14.24	2.55	0.21	
11:40	10	320	0.85	27.50	-109.0	8.08	0.173	14.00	2.98	0.19	
11:45	15	320	1.27	30.00	-112.0	8.07	0.173	13.85	3.15	0.18	
11:50	20	320	1.69	29.50	-118.0	8.04	0.173	13.80	3.18	0.10	
11:55	25	320	2.11	28.30	-129.0	8.01	0.173	13.75	3.20	0.00	
12:00	30	320	2.54	25.60	-130.0	8.03	0.173	13.80	3.38	0.01	
12:05	35	320	2.96	24.50	-132.0	8.04	0.172	13.75	3.50	0.00	
12:10	40	320	3.38	23.10	-131.0	8.05	0.172	13.72	3.60	0.00	
12:15	45	320	3.80	22.30	-133.0	8.01	0.172	13.80	3.68	0.00	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	007	Well ID:	OB-16
Date:	8/21/18	Sampled By:	JG		
Sampling Time:	9:35	Recorded By:	JG		
Weather:	Cloudy 75 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	4"	Screen Interval:	5' to 15'		
Total Depth:	17.95	Pump intake depth:	10'		
Depth to Water:	5.75				
Water Column:	12.20	Total Volume Purged:	3.33 gallons		
Gallons/Foot:	0.650	Pump on:	9:00	Off:	9:45
Gallons in Well:	7.93				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:00	0	360	0.00	60.7	-31.0	6.21	0.922	16.65	6.09	3.69	
9:05	5	360	0.48	38.00	-41.0	6.18	0.926	16.22	6.15	2.47	
9:10	10	360	0.95	14.30	-53.0	6.23	0.936	16.03	6.15	1.95	
9:15	15	360	1.43	9.70	-41.0	6.26	0.940	15.94	6.15	1.84	
9:20	20	360	1.90	9.10	-40.0	6.28	0.942	15.86	6.15	1.68	
9:25	25	360	2.38	7.70	-41.0	6.30	0.942	15.79	6.15	1.49	
9:30	30	360	2.85	7.30	-41.0	6.31	0.943	15.74	6.15	1.31	
9:35	35	360	3.33	6.90	-40.0	6.39	0.942	15.72	6.15	1.45	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	007	Well ID:	OB-17
Date:	8/21/18	Sampled By:	JG		
Sampling Time:	12:05	Recorded By:	JG		
Weather:	Cloudy 75 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low flow Bladder pump**		
Casing Diameter:	4"	Screen Interval:	3' to 13'		
Total Depth:	17.05	Pump intake depth:	12'		
Depth to Water:	5.15				
Water Column:	11.90	Total Volume Purged:	2.22 gallons		
Gallons/Foot:	0.650	Pump on:	11:30	Off:	12:15
Gallons in Well:	7.74				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:30	0	240	0.00	39.6	26.0	6.41	0.656	16.71	5.34	6.02	
11:35	5	240	0.32	25.10	22.0	6.41	0.679	16.12	5.60	2.92	
11:40	10	240	0.63	20.10	22.0	6.37	0.685	15.88	5.81	1.81	
11:45	15	240	0.95	12.00	22.0	6.34	0.685	15.90	6.03	1.46	
11:50	20	240	1.27	9.90	23.0	6.29	0.683	15.96	6.11	1.20	
11:55	25	240	1.59	6.80	23.0	6.28	0.681	16.00	6.17	1.01	
12:00	30	240	1.90	7.50	23.0	6.28	0.679	15.95	6.23	0.095	
12:05	35	240	2.22	7.10	23.0	6.28	0.673	16.01	6.27	0.087	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-18
Date:	8/21/18	Sampled By:	DW		
Sampling Time:	10:00	Recorded By:	DW		
Weather:	Overcast 75 F	Replicate/Split:	DUP-01-082118		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUV2J

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	4"	Screen Interval:	10' to 20'		
Total Depth:	22.00	Pump intake depth:	18'		
Depth to Water:	3.23				
Water Column:	18.77	Total Volume Purged:	4.23 gallons		
Gallons/Foot:	0.650	Pump on:	9:10	Off:	
Gallons in Well:	12.20				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:10	0	320	0.00	276.0	165.0	6.84	0.289	14.38	3.60	10.16	
9:15	5	320	0.42	112.00	169.0	6.80	0.289	12.88	4.00	10.00	
9:20	10	320	0.85	43.00	170.0	6.78	0.295	12.72	4.35	9.95	
9:25	15	320	1.27	28.50	175.0	6.75	0.295	12.50	4.80	8.18	
9:30	20	320	1.69	14.00	180.0	6.73	0.288	12.26	5.55	7.33	
9:35	25	320	2.11	14.60	186.0	6.71	0.280	12.29	5.85	6.71	
9:40	30	320	2.54	10.30	188.0	6.71	0.279	12.35	6.35	5.85	
9:45	35	320	2.96	8.90	190.0	6.71	0.277	12.40	6.80	4.15	
9:50	40	320	3.38	7.20	206.0	6.71	0.275	12.31	7.00	2.95	
9:55	45	320	3.80	7.00	205.0	6.72	0.272	12.33	7.10	2.90	
10:00	50	320	4.23	7.00	204.0	6.71	0.272	12.34	7.15	2.88	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-19
Date:	8/22/18	Sampled By:	JG, EB		
Sampling Time:	15:50	Recorded By:	JG, EB		
Weather:	Sunny 80 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	PF9RNCK8

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	5" to 20"		
Total Depth:	21.30	Pump intake depth:	17"		
Depth to Water:	11.97				
Water Column:	9.33	Total Volume Purged:	2.96 gallons		
Gallons/Foot:	0.160	Pump on:	15:00	Off:	16:00
Gallons in Well:	1.49				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:05	0	280	0.00	101.0	31.0	6.2	0.189	14.19	12.03	1.72	
15:10	5	280	0.37	38.70	11.0	6.19	0.193	13.88	12.06	0.72	
15:15	10	280	0.74	9.20	-3.0	6.12	0.194	13.54	12.10	0.43	
15:20	15	280	1.11	8.10	-10.0	6.16	0.193	13.42	12.12	0.32	
15:25	20	280	1.48	4.60	-12.0	6.17	0.192	13.44	12.12	0.28	
15:30	25	280	1.85	3.60	-18.0	6.11	0.191	13.38	12.12	0.23	
15:35	30	280	2.22	4.00	-20.0	6.14	0.188	13.38	12.13	0.21	
15:40	35	280	2.59	4.70	-20.0	6.13	0.186	13.39	12.13	0.14	
15:45	40	280	2.96	4.90	-20.0	6.12	0.185	13.38	12.13	0.12	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-20A
Date:	8/23/18	Sampled By:	RJL		
Sampling Time:	12:35	Recorded By:	RJL		
Weather:	Rain, overcast 75 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	RT7P5PW4

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	6" to 21"		
Total Depth:	20.60	Pump intake depth:	20"		
Depth to Water:	14.91				
Water Column:	5.69	Total Volume Purged:	3 gallons		
Gallons/Foot:	0.160	Pump on:	11:47	Off:	12:55
Gallons in Well:	0.91				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Oxygen	Comments
11:50	0	220	0.00	636.0	61.0	6.13	0.196	15.09	15.02	5.21	
11:55	5	160	0.21	415.00	47.0	6.09	0.197	14.11	15.11	1.54	
12:00	10	160	0.42	321.00	42.0	6.09	0.197	13.61	15.12	1.31	
12:05	15	160	0.63	257.00	34.0	6.10	0.200	13.17	15.12	0.91	
12:10	20	200	1.06	40.70	29.0	6.08	0.202	12.90	15.15	0.72	
12:15	25	200	1.32	18.20	25.0	6.09	0.201	13.14	15.16	0.52	
12:20	30	200	1.59	8.70	20.0	6.09	0.202	13.30	15.16	0.44	
12:25	35	200	1.85	10.40	16.0	6.09	0.203	13.32	15.16	0.28	
12:30	40	200	2.11	10.70	14.0	6.10	0.203	13.29	15.16	0.22	
12:35	45	200	2.38	10.20	14.0	6.10	0.204	13.26	15.16	0.24	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-20B
Date:	8/23/18	Sampled By:	RJL		
Sampling Time:	10:45	Recorded By:	RJL		
Weather:	Sunny 74F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	RT7P5PW4

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	24' to 34'
Total Depth:	36.00	Pump intake depth:	30'
Depth to Water:	14.42		
Water Column:	21.58	Total Volume Purged:	2.1 gallons
Gallons/Foot:	0.160	Pump on:	9:50 Off: 11:08
Gallons in Well:	3.45		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:55	0	200	0.00	0.0	31.0	6.31	0.396	13.45	14.73	3.10	
10:00	5	160	0.21	0.00	-7.0	6.30	0.397	12.96	14.89	1.11	
10:05	10	140	0.37	1.60	-21.0	6.28	0.397	12.60	15.01	0.70	
10:10	15	140	0.55	8.70	-26.0	6.28	0.396	12.44	15.09	0.49	
10:15	20	140	0.74	13.10	-30.0	6.28	0.396	12.32	15.09	0.33	
10:20	25	140	0.92	12.40	-32.0	6.27	0.396	12.21	15.10	0.24	
10:25	30	140	1.11	12.00	-35.0	7.27	0.396	12.09	15.10	0.14	
10:30	35	140	1.29	11.40	-36.0	8.27	0.394	12.22	15.10	0.05	
10:35	40	140	1.48	5.20	-37.0	9.27	0.395	12.18	15.10	0.04	
10:40	45	140	1.66	4.60	-38.0	10.27	0.394	12.14	15.10	0.02	
10:45	50	140	1.85	4.1	-38.0	11.27	0.394	12.1	15.10	0.01	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	none	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-20B
Date:	9/5/18	Sampled By:	eb		
Sampling Time:	11:30	Recorded By:	eb		
Weather:	Sunny 90F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	PF9RNCK8

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	24' to 34'		
Total Depth:	36.00	Pump intake depth:	30'		
Depth to Water:	14.96				
Water Column:	21.04	Total Volume Purged:	3.17 gallons		
Gallons/Foot:	0.160	Pump on:	10:38	Off:	11:35
Gallons in Well:	3.37				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
10:40	0	240	0.00	21.5	-29.0	9.38	0.381	12.46	16.00	0.96	
10:45	5	240	0.32	27.3	-32.0	9.39	0.377	11.74	16.10	1.98	
10:50	10	240	0.63	41.8	-34.0	9.42	0.375	11.32	16.30	1.65	
10:55	15	240	0.95	11.9	-38.0	9.46	0.375	11.57	16.42	0.56	
11:00	20	240	1.27	21.0	-40.0	9.48	0.375	11.56	16.43	0.18	
11:05	25	240	1.59	26.9	-39.0	9.50	0.372	11.58	16.50	0.12	
11:10	30	240	1.90	27.4	-43.0	9.59	0.369	11.71	16.51	0.18	
11:15	35	240	2.22	27.1	-41.0	9.60	0.367	11.72	16.52	0.12	
11:20	40	240	2.54	27.2	-39.0	9.63	0.365	11.83	16.53	0.27	
11:25	45	240	2.85	27.0	-41.0	9.65	0.366	11.99	16.54	0.22	
11:30	50	240	3.17	26.8	-44.0	9.68	0.365	12.09	16.54	0.18	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	none	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-21
Date:	8/22/18	Sampled By:	EB		
Sampling Time:	10:30	Recorded By:	EB		
Weather:	Partly cloudy 75F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	PF9RNCK8

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	6' to 21'
Total Depth:	20.20	Pump intake depth:	17'
Depth to Water:	6.10		
Water Column:	14.10	Total Volume Purged:	3.17 gallons
Gallons/Foot:	0.160	Pump on:	9:25 Off: 10:50
Gallons in Well:	2.26		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:30	0	200	0.00	0.0	157.0	6.3	0.116	15.82	6.12	3.27	
9:35	5	200	0.26	76.50	171.0	6.44	0.108	15.94	6.12	4.95	
9:40	10	200	0.53	551.00	179.0	6.29	0.109	16.06	6.13	4.23	
9:45	15	200	0.79	468.00	181.0	6.26	0.109	15.94	6.14	3.86	
9:50	20	200	1.06	330.00	185.0	6.27	0.108	15.82	6.14	3.92	
9:55	25	200	1.32	276.00	185.0	6.25	0.109	15.73	6.14	3.24	
10:00	30	200	1.59	233.00	187.0	6.26	0.109	15.42	6.14	3.41	
10:05	35	200	1.85	150.00	193.0	6.25	0.102	18.19	6.14	2.70	
10:10	40	200	2.11	120.00	193.0	6.23	0.102	18.13	6.14	2.68	
10:15	45	200	2.38	78.00	192.0	6.25	0.103	18.10	6.14	2.69	
10:20	50	200	2.64	66.8	191.0	6.22	0.102	18.08	6.14	2.64	
10:25	55	200	2.91	65.7	194.0	6.23	0.102	18.08	6.14	2.65	
10:30	60	200	3.17	64.5	194.0	6.24	0.102	18.09	6.14	2.64	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Turbid, then clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-22
Date:	8/21/18	Sampled By:	JG		
Sampling Time:	13:20	Recorded By:	JG		
Weather:	Partly sunny 80F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	XP5XP8NP

PURGING INFORMATION

Casing Material:	PVc	Purge Method:	**Low Flow Bladder Pump**		
Casing Diameter:	2"	Screen Interval:	10' to 20'		
Total Depth:	21.85	Pump intake depth:	20		
Depth to Water:	13.85				
Water Column:	8.00	Total Volume Purged:	1.80 gallons		
Gallons/Foot:	0.160	Pump on:	12:50	Off:	13:35
Gallons in Well:	1.28				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
12:50	0	250	0.00	50.5	189.0	6.07	0.338	16.26	13.97	9.27	
12:55	5	200	0.26	33.10	207.00	6.02	0.329	15.74	14.21	8.82	
13:00	10	200	0.53	7.00	229.0	5.97	0.321	15.42	14.57	7.90	
13:05	15	160	0.63	4.50	232.0	5.98	0.321	15.72	14.86	7.73	
13:10	20	160	0.85	4.90	234.0	5.99	0.322	15.70	15.03	7.47	
13:15	25	160	1.06	5.90	235.0	6.00	0.322	15.66	15.26	7.39	
13:20	30	160	1.27	6.60	235.0	6.02	0.321	15.67	15.42	7.21	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	contained
Color:	clear	Turbidity(qualitative):	good
Odor:	none	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-23
Date:	8/21/18	Sampled By:	DW		
Sampling Time:	14:55	Recorded By:	DW		
Weather:	Partly sunny 80 F	Replicate/Split:	N/A		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUV2J

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low flow bladder pump**		
Casing Diameter:	2"	Screen Interval:	10' to 20'		
Total Depth:	21.18	Pump intake depth:	22		
Depth to Water:	17.10				
Water Column:	4.08	Total Volume Purged:	2.85 Gallons		
Gallons/Foot:	0.160	Pump on:	14:10	Off:	
Gallons in Well:	0.65				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:10	0	240	0.00	7.6	-107.0	6.35	0.913	15.42	17.10	4.75	
14:15	5	240	0.32	7.80	-107.0	6.36	0.915	15.21	17.48	4.75	
14:20	10	240	0.63	8.00	-108.00	6.37	0.919	15.00	17.91	4.74	
14:25	15	240	0.95	7.50	-109.0	6.37	0.909	15.05	17.98	5.00	
14:30	20	240	1.27	7.50	-110.0	6.36	0.898	15.05	18.11	4.89	
14:35	25	240	1.59	7.00	-111.0	6.38	0.896	15.09	18.18	4.70	
14:40	30	240	1.90	7.20	-111.0	6.36	0.898	15.11	18.21	4.68	
14:45	35	240	2.22	7.30	-111.0	6.37	0.900	15.08	18.24	4.65	
14:50	40	240	2.54	7.30	-111.0	6.36	0.899	15.09	18.26	4.60	
14:55	45	240	2.85	7.40	-111.0	6.37	0.900	15.12	18.30	4.57	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-24
Date:	8/22/18	Sampled By:	DW		
Sampling Time:	10:25	Recorded By:	DW		
Weather:	Sunny 80 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUV2J

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	5' to 15'		
Total Depth:	18.05	Pump intake depth:	13		
Depth to Water:	3.60				
Water Column:	14.45	Total Volume Purged:	3.80 gallons		
Gallons/Foot:	0.160	Pump on:	9:45	Off:	
Gallons in Well:	2.31				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:45	0	360	0.00	100.0	157.0	7.04	0.714	15.88	3.60	1.01	
9:50	5	360	0.48	98.30	152.0	7.10	0.710	15.55	4.35	0.55	
9:55	10	360	0.95	95.50	148.0	7.15	0.706	15.22	5.80	0.36	
10:00	15	360	1.43	42.00	147.0	7.17	0.709	15.55	5.85	0.33	
10:05	20	360	1.90	11.00	143.0	7.18	0.700	15.52	5.93	0.40	
10:10	25	360	2.38	1.40	141.0	7.16	0.699	15.43	6.00	0.29	
10:15	30	360	2.85	1.30	143.0	7.14	0.701	15.40	6.03	0.25	
10:20	35	360	3.33	1.10	142.0	7.13	0.700	15.35	6.05	0.21	
10:25	40	360	3.80	1.20	141.0	7.13	0.700	15.34	6.06	0.20	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-25
Date:	8/21/18	Sampled By:	RJL, EB		
Sampling Time:	10:35	Recorded By:	RJL, EB		
Weather:	Cloudy 77 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	RT7P5PW4

PURGING INFORMATION

Casing Material:	PVc	Purge Method:	**Low Flow bladder pump**		
Casing Diameter:	2"	Screen Interval:	10' to 20'		
Total Depth:	18.35	Pump intake depth:	16'		
Depth to Water:	11.30				
Water Column:	7.05	Total Volume Purged:	5.5 gallons		
Gallons/Foot:	0.160	Pump on:	9:10	Off:	10:50
Gallons in Well:	1.13				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:10	0	200	0.00	241.0	112.0	6.81	0.628	15.83	11.72	9.09	
9:15	5	200	0.26	112.00	128.0	6.78	0.616	16.04	12.11	4.62	
9:20	10	200	0.53	130.00	131.0	6.77	0.621	16.39	12.36	4.13	
9:25	15	200	0.79	81.10	138.0	6.76	0.621	16.38	12.61	4.06	
9:30	20	200	1.06	114.00	140.0	6.76	0.622	16.30	12.67	4.04	
9:35	25	200	1.32	338.00	142.0	6.76	0.621	16.24	12.72	3.81	
9:40	30	200	1.59	212.00	145.0	6.77	0.625	16.14	12.78	3.89	
9:45	35	200	1.85	318.00	148.0	6.77	0.630	16.37	12.82	4.46	
9:50	40	200	2.11	315.00	151.0	6.79	0.636	17.11	12.84	5.76	
9:55	45	150	1.78	257.00	154.0	6.78	0.637	17.26	12.86	4.98	
10:00	50	150	1.98	211.0	157.0	6.78	0.636	17.59	12.88	4.88	
10:05	55	150	2.18	206.0	158.0	6.78	0.638	17.61	13.01	4.67	
10:10	60	150	2.38	168.0	161.0	6.77	0.638	17.77	13.02	4.58	
10:15	65	150	2.58	94.0	163.0	6.77	0.641	17.89	13.03	4.85	
10:20	70	150	2.77	48.0	164.0	6.77	0.643	17.85	13.05	4.92	
10:25	75	150	2.97	42.0	165.0	6.77	0.644	17.93	13.07	4.96	
10:30	80	150	3.17	38.0	166.0	6.77	0.645	17.9	13.09	4.92	
10:35	85	150	3.37	35.0	167.0	6.77	0.646	17.88	13.11	4.95	

OBSERVATIONS DURING SAMPLING

Well Condition:	outer lid missing bolts	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	mostly clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	170101	Task:	007	Well ID:	OB-26
Date:		Sampled By:			
Sampling Time:	Damaged	Recorded By:			
Weather:		Replicate/Split:			

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	10' to 20'
Total Depth:		Pump intake depth:	18'
Depth to Water:			
Water Column:		Total Volume Purged:	
Gallons/Foot:		Pump on:	Off:
Gallons in Well:			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
			Well damaged and no longer exists - No sample								

OBSERVATIONS DURING SAMPLING

Well Condition:	NA	Purge Water Disposal:	NA
Color:	NA	Turbidity(qualitative):	NA
Odor:	NA	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-27
Date:	8/22/18	Sampled By:	JG		
Sampling Time:	14:35	Recorded By:	JG		
Weather:	Sunny 80 F	Replicate/Split:	NONE		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	24.5' to 39.5'
Total Depth:	40.15	Pump intake depth:	32'
Depth to Water:	15.10		
Water Column:	25.05	Total Volume Purged:	3.63 gallons
Gallons/Foot:	0.160	Pump on:	13:40 Off: 14:45
Gallons in Well:	4.01		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:40	0	250	0.00	735.0	47.0	5.63	0.344	19.78	15.11	3.21	
13:45	5	250	0.33	648.00	51.0	5.70	0.346	19.48	15.14	1.20	
13:50	10	250	0.66	491.00	37.0	5.79	0.352	16.46	15.07	0.96	
13:55	15	250	0.99	442.00	15.0	5.93	0.360	16.87	15.12	0.78	
14:00	20	250	1.32	378.00	-7.0	6.20	0.359	16.82	15.09	0.61	
14:05	25	250	1.65	193.00	-33.0	6.33	0.358	16.42	15.08	0.52	
14:10	30	250	1.98	140.00	-43.0	6.41	0.358	16.08	15.11	0.44	
14:15	35	250	2.31	87.00	-49.0	6.50	0.347	16.17	15.13	0.32	
14:20	40	250	2.64	54.90	-54.0	6.48	0.342	16.25	15.09	0.25	
14:25	45	250	2.97	44.60	-60.0	6.53	0.342	16.31	15.10	0.20	
14:20	50	250	3.30	42.1	-63.0	6.59	0.343	16.42	15.08	0.14	
14:35	55	250	3.63	40.8	-65.0	6.61	0.343	16.47	15.12	0.11	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	clear	Turbidity(qualitative):	cloudy
Odor:	slight odor	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-28
Date:	8/21/17	Sampled By:	DW		
Sampling Time:	12:35	Recorded By:	DW		
Weather:	Overcast 78 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUV2J

PURGING INFORMATION

Casing Material:	PVc	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	3 ' to 18'		
Total Depth:	18.60	Pump intake depth:	16'		
Depth to Water:	1.60				
Water Column:	17.00	Total Volume Purged:	4.65 gallons		
Gallons/Foot:	0.160	Pump on:	11:40	Off:	
Gallons in Well:	2.72				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:40	0	320	0.00	100.0	-3.0	6.86	1.030	13.60	1.65	8.15	
11:45	5	320	0.42	99.90	-3.0	6.85	1.030	13.59	1.71	8.11	
11:50	10	320	0.85	83.50	-3.0	6.82	1.020	13.54	1.75	5.88	
11:55	15	320	1.27	74.60	-1.0	6.80	1.010	13.52	1.76	5.21	
12:00	20	320	1.69	61.50	1.0	6.8	1.010	13.47	1.75	4.86	
12:05	25	320	2.11	58.30	1.0	6.79	1.010	13.44	1.74	4.11	
12:10	30	320	2.54	52.00	-7.0	6.78	1.010	13.52	1.74	3.35	
12:15	35	320	2.96	49.20	-9.0	6.79	1.010	13.57	1.74	3.05	
12:20	40	320	3.38	48.50	-9.0	6.79	1.010	13..60	1.74	3.00	
12:25	45	320	3.80	47.00	-9.0	6.79	1.010	13.67	1.74	2.87	
12:30	50	320	4.23	45.5	-9.0	6.79	1.010	13.64	1.73	2.73	
12:35	55	320	4.65	44.8	-9.0	6.79	1.010	13.65	1.73	2.28	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-29
Date:	8/22/18	Sampled By:	RJL		
Sampling Time:	16:05	Recorded By:	RJL		
Weather:	Sunny 80 F	Replicate/Split:			

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	RT7P5PW4

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	18' to 35'
Total Depth:	34.45	Pump intake depth:	32'
Depth to Water:	5.34		
Water Column:	29.11	Total Volume Purged:	4.99 gallons
Gallons/Foot:	0.160	Pump on:	15:03 Off: 16:18
Gallons in Well:	4.66		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:10	0	220	0.00	209.0	208.0	5.56	0.133	22.87	5.35	6.29	
15:15	5	220	0.29	312.00	214.0	6.43	0.121	17.75	5.35	3.50	
15:20	10	240	0.63	381.00	216.0	6.39	0.121	16.86	5.36	3.16	
15:25	15	280	1.11	212.00	217.0	6.36	0.121	16.09	5.39	3.12	
15:30	20	280	1.48	136.00	217.0	6.36	0.121	15.20	5.39	3.01	
15:35	25	280	1.85	77.20	217.0	6.36	0.121	15.67	5.39	2.87	
15:40	30	280	2.22	41.30	217.0	6.37	0.124	14.55	5.39	3.01	
15:45	35	280	2.59	32.80	216.0	6.38	0.123	14.65	5.39	2.89	
15:50	40	280	2.96	27.40	216.0	6.39	0.121	15.37	5.39	2.20	
15:55	45	280	3.33	25.60	215.0	6.39	0.121	15.22	5.39	2.69	
16:00	50	280	3.70	23.6	216.0	6.40	0.121	14.87	5.39	2.68	
16:05	55	280	4.07	22.9	216.0	6.39	0.121	14.92	5.39	2.72	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-30A
Date:	8/24/18	Sampled By:	DW		
Sampling Time:	12:20	Recorded By:	DW		
Weather:	sunny, hot 75 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUV2J

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low flow bladder pump**
Casing Diameter:	2"	Screen Interval:	
Total Depth:	20.70	Pump intake depth:	20.5
Depth to Water:	18.25		
Water Column:	2.45	Total Volume Purged:	3.17 gallons
Gallons/Foot:	0.000	Pump on:	11:30 Off:
Gallons in Well:			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:30	0	240	0.00	110.0	180.00	6.17	0.261	13.42	18.40	2.00	
11:35	5	240	0.32	105.00	180.00	6.19	0.263	13.35	18.62	1.95	
11:40	10	240	0.63	100.00	181.00	6.21	0.266	13.30	18.71	1.80	
11:45	15	240	0.95	50.20	188.00	6.12	0.260	12.88	18.80	2.00	
11:50	20	240	1.27	11.40	189.00	6.16	0.260	12.36	18.90	2.43	
11:55	25	240	1.59	13.10	192.00	6.17	0.260	12.77	18.91	2.44	
12:00	30	240	1.90	3.00	192.00	6.14	0.262	12.73	18.92	2.38	
12:05	35	240	2.22	1.50	195.00	6.15	0.263	12.74	18.95	2.38	
12:10	40	240	2.54	1.30	197.00	6.14	0.264	12.78	18.97	2.33	
12:15	45	240	2.85	1.20	197.00	6.12	0.264	12.80	18.99	2.31	
12:20	50	240	3.17	1.1	199.00	6.11	0.263	12.83	19.00	2.28	

OBSERVATIONS DURING SAMPLING

Well Condition:		Purge Water Disposal:	
Color:		Turbidity(qualitative):	
Odor:		Other (OVA, HNU,etc.):	

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-30B
Date:	8/22/18	Sampled By:	JG		
Sampling Time:	15:55	Recorded By:	JG		
Weather:	Sunny 80 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	21' to 36'
Total Depth:	38.50	Pump intake depth:	34'
Depth to Water:	18.07		
Water Column:	20.43	Total Volume Purged:	2.96 gallons
Gallons/Foot:	0.160	Pump on:	15:15 Off: 16:10
Gallons in Well:	3.27		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:15	0	280	0.00	26.3	74.0	6.22	0.219	16.88	18.51	2.78	
15:20	5	280	0.37	65.20	137.0	6.09	0.233	13.26	18.69	2.08	
15:25	10	280	0.74	47.10	152.0	6.08	0.234	12.87	18.69	1.57	
15:30	15	280	1.11	46.00	167.0	6.03	0.236	12.55	18.69	1.15	
15:35	20	280	1.48	26.40	177.0	5.98	0.235	12.41	18.69	0.90	
15:40	25	280	1.85	16.10	184.0	5.96	0.236	12.29	18.69	0.74	
15:45	30	280	2.22	10.70	190.0	5.91	0.237	12.19	18.69	0.62	
15:50	35	280	2.59	8.30	196.0	5.88	0.237	12.08	18.69	0.53	
15:55	40	280	2.96	7.90	199.0	5.86	0.237	12.04	18.69	0.47	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-30C
Date:	8/23/18	Sampled By:	JG, EB		
Sampling Time:	14:55	Recorded By:	JG, EB		
Weather:	Sunny 80 F	Replicate/Split:			

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FC4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	40' to 50'
Total Depth:	52.05	Pump intake depth:	45'
Depth to Water:	19.66		
Water Column:	32.39	Total Volume Purged:	2.47 gallons
Gallons/Foot:	0.160	Pump on:	10:50 Off: 12:25
Gallons in Well:	5.18		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:00	0	170	0.00	178.0	-21.0	7.94	0.366	16.83	19.15	2.29	
14:05	5	170	0.22	146.00	-31.0	7.95	0.359	17.54	19.65	2.09	
14:10	10	170	0.45	116.00	-38.0	8.00	0.360	17.14	20.60	1.69	
14:15	15	170	0.67	101.00	-38.0	8.02	0.361	16.66	21.10	1.60	
14:20	20	170	0.90	67.50	-19.0	8.03	0.361	16.56	21.30	2.16	
14:25	25	170	1.12	64.10	-47.0	8.05	0.362	16.34	21.60	0.59	
14:30	30	170	1.35	58.30	-46.0	8.07	0.366	16.07	21.80	0.38	
14:35	35	170	1.57	51.80	-46.0	8.07	0.364	16.12	21.90	0.36	
14:40	40	170	1.80	50.60	-46.0	8.07	0.362	16.28	22.00	0.30	
14:45	45	170	2.02	49.30	-46.0	8.09	0.362	16.22	22.00	0.26	
14:50	50	170	2.25	48.5	-46.0	8.09	0.362	16.21	22.1	0.19	
14:55	55	170	2.47	48.2	-46.0	8.09	0.362	16.29	22.10	0.20	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	slightly turbid
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-31
Date:	8/22/18	Sampled By:	JG		
Sampling Time:	12:20	Recorded By:	JG		
Weather:	Partly sunny 78 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	23' to 33'
Total Depth:	33.00	Pump intake depth:	30'
Depth to Water:	14.96		
Water Column:	18.04	Total Volume Purged:	3.33 gallons
Gallons/Foot:	0.160	Pump on:	11:35 Off: 12:30
Gallons in Well:	2.89		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:35	0	280	0.00	126.0	-90.0	6.62	0.239	15.40	15.08	2.86	
11:40	5	280	0.37	124.00	-93.0	6.62	0.244	14.44	15.11	2.55	
11:45	10	280	0.74	89.40	-100.0	6.64	0.248	13.25	15.02	2.21	
11:50	15	280	1.11	48.80	-98.0	6.59	0.251	12.89	15.02	1.60	
11:55	20	280	1.48	45.60	-97.0	6.55	0.252	12.84	15.09	1.14	
12:00	25	280	1.85	44.10	-97.0	6.54	0.252	13.15	15.03	0.92	
12:05	30	280	2.22	42.70	-96.0	6.53	0.252	13.31	15.04	0.74	
12:10	35	280	2.59	41.90	-99.0	6.59	0.253	13.03	15.02	0.84	
12:15	40	280	2.96	40.90	-101.0	6.63	0.253	13.07	15.08	0.79	
12:20	45	280	3.33	39.80	-103.0	6.66	0.252	13.15	15.06	0.71	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	007	Well ID:	OB-32
Date:	8/22/18	Sampled By:	DW		
Sampling Time:	16:15	Recorded By:	DW		
Weather:	Sunny, hot 82 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUV2J

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	10' to 20'
Total Depth:	23.00	Pump intake depth:	20
Depth to Water:	17.40		
Water Column:	5.60	Total Volume Purged:	4.23 gallons
Gallons/Foot:	0.160	Pump on:	15:25 Off:
Gallons in Well:	0.90		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:25	0	320	0.00	100.0	-115.0	6.67	0.367	13.42	17.40	11.48	
15:30	5	320	0.42	99.50	-118.0	6.67	0.366	13.39	17.40	11.40	
15:35	10	320	0.85	41.00	-122.0	6.71	0.363	11.95	17.40	9.36	
15:40	15	320	1.27	7.00	-123.0	6.69	0.363	11.90	17.40	8.25	
15:45	20	320	1.69	0.30	-123.0	6.68	0.363	11.88	17.40	7.70	
15:50	25	320	2.11	0.00	-122.0	6.69	0.362	11.79	17.40	7.43	
15:55	30	320	2.54	0.00	-122.0	6.70	0.362	11.71	17.40	7.10	
16:00	35	320	2.96	0.00	-122.0	6.72	0.361	11.62	17.40	6.94	
16:05	40	320	3.38	0.00	-123.0	6.70	0.360	11.65	17.40	6.92	
16:10	45	320	3.80	0.00	-123.0	6.70	0.360	11.67	17.40	6.89	
16:15	50	320	4.23	0.00	-122.0	6.71	0.361	11.65	17.40	6.83	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	OB-33
Date:	8/22/18	Sampled By:	DW		
Sampling Time:	14:25	Recorded By:	DW		
Weather:	Sunny, hot 85 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUV2J

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	66' to 76'		
Total Depth:	52.05	Pump intake depth:	71'		
Depth to Water:	8.64				
Water Column:	43.41	Total Volume Purged:	4.65 gallons		
Gallons/Foot:	0.160	Pump on:	13:30	Off:	
Gallons in Well:	6.95				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:30	0	320	0.00	100.0	191.0	6.85	0.140	16.00	8.65	10.05	
13:35	5	320	0.42	99.30	189.0	6.84	0.138	15.81	8.91	9.11	
13:40	10	320	0.85	87.10	188.0	6.84	0.137	15.75	9.41	7.81	
13:45	15	320	1.27	80.50	187.0	6.83	0.134	15.53	9.70	6.00	
13:50	20	320	1.69	74.30	179.0	6.82	0.135	15.01	9.89	5.81	
13:55	25	320	2.11	68.30	170.0	6.81	0.135	15.75	10.01	5.69	
14:00	30	320	2.54	40.00	164.0	6.80	0.136	14.55	10.19	5.50	
14:05	35	320	2.96	21.10	146.0	6.85	0.135	14.24	10.25	5.43	
14:10	40	320	3.38	22.00	147.0	6.85	0.135	14.09	10.31	5.44	
14:15	45	320	3.80	22.80	145.0	6.84	0.135	13.89	10.35	5.46	
14:20	50	320	4.23	23.5	144.0	6.81	0.136	13.85	10.4	5.50	
14:25	55	320	4.65	23.0	145.0	6.82	0.136	13.9	10.43	5.48	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-2(279-289)
Date:	8/28/18	Sampled By:	DW CR		
Sampling Time:	10:50	Recorded By:	DW		
Weather:	Sunny, Hot 82 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	279' to 289'		
Total Depth:	289'	Pump intake depth:	284'		
Depth to Water:	10.85				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	10:30	Off:	
Gallons in Well:	0.41	PSI at 125	D/R at 10sec /1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
10:50	20	1600	0.42	0.0	-91.0	9.13	1.080	22.66		8.99	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-2(452-462)
Date:	8/28/18	Sampled By:	DW CR		
Sampling Time:	11:30	Recorded By:	DW		
Weather:	Sunny, Hot 88 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVc	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	452' to 462'		
Total Depth:	462'	Pump intake depth:	457		
Depth to Water:	10.66				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	11:00	Off:	
Gallons in Well:	0.41	PSI at 200	D/R at 20 sec /45 sec		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:30	30	1600	0.42	0.0	-30.0	9.86	1.880	22.75		1.60	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-3(77-87)
Date:	8/30/18	Sampled By:	DW		
Sampling Time:	13:35	Recorded By:	DW		
Weather:	Sunny 80 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1'	Screen Interval:	77' to 87'		
Total Depth:	87'	Pump intake depth:	82'		
Depth to Water:	13.14				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	13:22	Off:	13:49
Gallons in Well:	0.41	PSI at 50 psi	D/R at 10 sec / 1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:35	12		0.42	0.0	-9.0	7.14	0.512	19.05		8.82	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	none	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-3DS(155-160)
Date:	8/30/2018	Sampled By:	DW		
Sampling Time:	13:00	Recorded By:	DW		
Weather:	Sunny 87 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	155' to 160'		
Total Depth:	160'	Pump intake depth:	157.5		
Depth to Water:	15.40				
Water Column:	NA	Total Volume Purged:	800 ml		
Gallons/Foot:	0.041	Pump on:	12:50	Off:	
Gallons in Well:	0.21	PSI at 75 psi	D/R at 15 sec / 1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:00	10		0.21	0.0	-58.0	10.2	0.971	19.49		9.10	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	none	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-3DD(175-180)
Date:	8/30/18	Sampled By:	DW		
Sampling Time:	12:30	Recorded By:	DW		
Weather:	Sunny 87 F	Replicate/Split:	**None**		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FC4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	175-180		
Total Depth:	180'	Pump intake depth:	177.5		
Depth to Water:	15.08				
Water Column:	NA	Total Volume Purged:	800 ml		
Gallons/Foot:	0.041	Pump on:	12:27	Off:	
Gallons in Well:	0.21	PSI at 85	D/R at 10 sec / 1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
12:30	3		0.21	0.0	-12.0	9.48	0.209	18.94		9.35	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-4(333-343)
Date:	8/30/18	Sampled By:	DW		
Sampling Time:	15:50	Recorded By:	DW		
Weather:	Sunny, 80 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FC4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	333' to 343'		
Total Depth:	343'	Pump intake depth:	338'		
Depth to Water:	28.45				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	15:40	Off:	16:10
Gallons in Well:	0.41	PSI at 150	D/R at 15 sec/1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:50	10	1600		0.0	-41.0	11.1	0.319	17.65		9.56	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	none	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-4(393-403)
Date:	8/30/18	Sampled By:	DW		
Sampling Time:	15:20	Recorded By:	DW		
Weather:	Sunny 80 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	393' to 403'		
Total Depth:	403'	Pump intake depth:	398'		
Depth to Water:	28.92				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	15:05	Off:	
Gallons in Well:	0.41	PSI at 170	D/R 15 sec/1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:20	15		0.42	0.0	89.0	7.09	0.166	17.62		1.42	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-4A(62-72)
Date:	8/30/18	Sampled By:	DW		
Sampling Time:	14:20	Recorded By:	DW		
Weather:	Sunny 85 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FC4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	62' to 72'		
Total Depth:	72'	Pump intake depth:	67'		
Depth to Water:	15.00				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.040	Pump on:	14:00	Off:	
Gallons in Well:	0.41	PSI at 40	D/R at 10 sec / 1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:20	20		0.42	2.7	86.0	6.8	0.140	20.05		3.25	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-4A(113-123)
Date:	8/31/18	Sampled By:	DW		
Sampling Time:	14:45	Recorded By:	DW		
Weather:	Sunny 85 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FC4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	113' to 123'		
Total Depth:	123'	Pump intake depth:	118'		
Depth to Water:	30.12				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	14:40	Off:	
Gallons in Well:	0.41	PSI at 60	D/R at 10 sec/1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:45	5		0.42	0.0	101.0	6.68	0.134	18.10		9.62	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-5
Date:	8/24/18	Sampled By:	RJL		
Sampling Time:	11:55	Recorded By:	RJL		
Weather:	Sunny 79 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Flow flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	99' to 119'		
Total Depth:	121.85	Pump intake depth:	109		
Depth to Water:	12.36				
Water Column:	109.49	Total Volume Purged:	1.59 gallons		
Gallons/Foot:	0.160	Pump on:	11:03	Off:	12:36
Gallons in Well:	17.52				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:05	0	120	0.00	10.5	-68.0	11.24	0.976	23.59	12.61	3.60	
11:10	5	120	0.16	52.60	-103.0	11.52	1.050	18.55	12.64	1.72	
11:15	10	120	0.32	61.80	-108.0	11.54	1.060	18.03	12.65	1.49	
11:20	15	120	0.48	46.40	-110.0	11.55	1.060	17.81	12.65	1.35	
11:25	20	120	0.63	31.90	-112.0	11.52	1.060	17.36	12.65	1.13	
11:30	25	120	0.79	24.10	-112.0	11.47	1.060	17.17	12.65	0.98	
11:35	30	120	0.95	26.30	-115.0	11.49	1.050	17.26	12.65	0.88	
11:40	35	120	1.11	18.70	-118.0	11.53	1.050	17.18	12.65	0.80	
11:45	40	120	1.27	18.20	-121.0	11.58	1.050	17.23	12.65	0.76	
11:50	45	120	1.43	18.80	-123.0	11.59	1.050	17.35	12.65	0.74	
11:55	50	120	1.59	19.1	-124.0	11.58	1.050	17.43	12.65	0.72	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID: RW-5A
Date:	8/22/18	Sampled By:	EB	
Sampling Time:	12:30	Recorded By:	EB	
Weather:	Cloudy 80 F	Replicate/Split:	None	

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	PF9RNCK8

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	54' to 74'		
Total Depth:	75.60	Pump intake depth:	65'		
Depth to Water:	11.98				
Water Column:	63.62	Total Volume Purged:	1.43 gallons		
Gallons/Foot:	0.160	Pump on:	11:30	Off:	12:50
Gallons in Well:	10.18				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:40	0	120	0.00	31.8	173.0	6.98	0.342	15.37	13.25	1.03	
11:45	5	120	0.16	49.40	155.0	6.98	0.341	15.74	13.70	0.68	
11:50	10	120	0.32	33.70	140.0	6.93	0.341	15.96	13.98	0.56	
11:55	15	120	0.48	25.60	129.0	6.93	0.341	16.03	14.12	0.49	
12:00	20	120	0.63	20.60	93.0	6.95	0.332	15.95	14.38	0.46	
12:05	25	120	0.79	19.00	61.0	6.97	0.328	15.81	14.47	0.39	
12:10	30	120	0.95	18.90	19.0	6.96	0.320	15.79	14.60	0.37	
12:15	35	120	1.11	17.70	-2.0	6.97	0.310	15.72	14.75	0.34	
12:20	40	120	1.27	15.80	-11.0	6.99	0.304	15.66	14.80	0.33	
12:25	45	120	1.43	14.20	-18.0	6.99	0.298	15.59	14.85	0.32	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-6
Date:	8/23/18	Sampled By:	RJL		
Sampling Time:	14:25	Recorded By:	RJL		
Weather:	Sunny 76 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	RT7P5PW4

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	99' to 119'		
Total Depth:	122.10	Pump intake depth:	109		
Depth to Water:	12.89				
Water Column:	109.21	Total Volume Purged:	3.3 gallons		
Gallons/Foot:	1.456	Pump on:	13:46	Off:	14:40
Gallons in Well:	17.47				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (°C)	Depth to Water	Diss. Oxygen	Comments
13:50	0	280	0.00	19.4	-17.0	6.31	0.257	15.02	13.15	2.08	
13:55	5	260	0.34	0	-23	6.37	0.514	11.96	12.98	1.10	
14:00	10	260	0.69	0	-27.0	6.35	0.586	11.44	13.00	0.54	
14:05	15	280	1.11	5.2	-31.0	6.33	0.620	11.37	13.02	0.27	
14:10	20	280	1.48	0	-34.0	6.33	0.635	11.39	13.02	0.17	
14:15	25	280	1.85	0	-37.0	6.32	0.628	11.52	13.02	0.06	
14:20	30	280	2.22	0	-38.0	6.32	0.627	11.26	13.02	0.00	
14:25	35	280	2.59	0.30	-40.0	6.32	0.621	11.27	13.02	0.00	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-6
Date:	9/5/18	Sampled By:	EB		
Sampling Time:	10:15	Recorded By:	EB		
Weather:	Sunny 85 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	PF9RNCK8

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	99' to 119'		
Total Depth:	122.10	Pump intake depth:	109		
Depth to Water:	13.40				
Water Column:	108.70	Total Volume Purged:	2.97 gallons		
Gallons/Foot:	1.449	Pump on:	9:15	Off:	10:20
Gallons in Well:	17.39				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (°C)	Depth to Water	Diss. Oxygen	Comments
9:30	0	250	0.00	7.0	-15.0	8.38	0.565	16.12	13.45	0.88	
9:35	5	250	0.33	20.9	-40	8.43	0.572	15.02	13.50	0.67	
9:40	10	250	0.66	37.9	-51.0	9.02	0.577	13.96	13.51	0.82	
9:45	15	250	0.99	38.4	-57.0	9.05	0.575	13.36	13.51	0.59	
9:50	20	250	1.32	38.2	-61.0	9.09	0.574	13.31	13.51	0.57	
9:55	25	250	1.65	39	-64.0	9.13	0.558	13.34	13.51	0.57	
10:00	30	250	1.98	38.6	-65.0	9.17	0.548	13.30	13.51	0.56	
10:05	35	250	2.31	20.7	-57.0	9.22	0.563	12.88	13.51	0.56	
10:10	40	250	2.64	20.3	-58.0	9.29	0.560	12.87	13.51	0.49	
10:15	45	250	2.97	19.8	-61.0	9.33	0.556	12.95	13.51	0.29	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-6A
Date:	8/23/18	Sampled By:	RJL		
Sampling Time:	15:45	Recorded By:	RJL		
Weather:	Sunny 77F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	RT7P5PW4

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	58' to 78'		
Total Depth:	80.25	Pump intake depth:	75		
Depth to Water:	13.53				
Water Column:	66.72	Total Volume Purged:	1.66 gallons		
Gallons/Foot:	0.160	Pump on:	15:06	Off:	16:03
Gallons in Well:	10.68				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:10	0	180	0.00	65.7	-23.0	6.67	0.488	15.97	13.94	5.76	
15:15	5	180	0.24	5.70	-15.0	6.49	0.589	12.93	14.16	1.91	
15:20	10	180	0.48	2.40	-18.0	6.47	0.643	12.38	14.22	0.81	
15:25	15	180	0.71	2.00	-20.0	6.47	0.664	12.07	14.26	0.47	
15:30	20	180	0.95	1.00	-22.0	6.46	0.670	12.04	14.29	0.32	
15:35	25	180	1.19	1.20	-22.0	6.44	0.664	12.17	14.31	0.18	
15:40	30	180	1.43	1.60	-23.0	6.42	0.661	12.10	14.33	0.13	
15:45	35	180	1.66	1.30	-22.0	6.41	0.658	12.07	14.35	0.11	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-6A
Date:	9/5/18	Sampled By:	EB		
Sampling Time:	15:15	Recorded By:	EB		
Weather:	Sunny 90 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	PF9RNCK8

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	58' to 78'
Total Depth:	80.25	Pump intake depth:	75
Depth to Water:	14.05		
Water Column:	66.20	Total Volume Purged:	1.66 gallons
Gallons/Foot:	0.160	Pump on:	12:26 Off: 13:20
Gallons in Well:	10.59		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
12:40	0	180	0.00	7.4	2.0	9.2	0.529	19.31	14.60	1.19	
12:45	5	180	0.24	9.3	-17.0	9.33	0.564	17.12	14.70	0.58	
12:50	10	180	0.48	7.9	-22.0	9.38	0.568	16.50	14.75	0.41	
12:55	15	180	0.71	7.1	-27.0	9.42	0.569	16.17	14.77	0.34	
13:00	20	180	0.95	6.7	-27.0	9.45	0.568	16.22	14.77	0.30	
13:05	25	180	1.19	6.7	-32.0	9.50	0.563	16.17	14.77	0.25	
13:10	30	180	1.43	4.8	-34.0	9.56	0.555	16.05	14.77	0.23	
13:15	35	180	1.66	5.4	-35.0	9.60	0.543	16.09	14.77	0.19	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-7
Date:	8/22/18	Sampled By:	JG		
Sampling Time:	10:25	Recorded By:	JG		
Weather:	Sunny 75 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	99' to 119'		
Total Depth:	120.65	Pump intake depth:	115		
Depth to Water:	2.72				
Water Column:	117.93	Total Volume Purged:	2.22 gallons		
Gallons/Foot:	0.160	Pump on:	9:35	Off:	10:35
Gallons in Well:	18.87				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:35	0	210	0.00	1.7	165.0	6.9	0.103	20.37	2.75	7.15	
9:40	5	210	0.28	0.10	167.0	6.80	0.099	19.50	2.81	6.80	
9:45	10	210	0.55	9.60	171.0	6.76	0.101	17.68	2.81	6.33	
9:50	15	210	0.83	31.90	177.0	6.73	0.102	16.75	2.81	6.28	
9:55	20	210	1.11	36.10	185.0	6.62	0.102	16.48	2.81	5.82	
10:00	25	210	1.39	30.90	183.0	6.68	0.100	16.81	2.81	5.45	
10:05	30	210	1.66	23.10	189.0	6.64	0.100	16.62	2.81	5.61	
10:10	35	210	1.94	19.90	193.0	6.58	0.100	16.51	2.81	5.43	
10:15	40	210	2.22	22.00	201.0	6.51	0.100	16.48	2.81	5.27	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-8A(163-173)
Date:	8/29/18	Sampled By:	DW		
Sampling Time:	11:00	Recorded By:	DW		
Weather:	Hot Sunny, 90 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	163' to 173'		
Total Depth:	173.00	Pump intake depth:	163'		
Depth to Water:	54.60				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	10:45	Off:	
Gallons in Well:	0.41	PSI at 100	D/R 15s / 1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:00	15	1600	0.42	0.0	-55.0	7.32	0.455	20.75		9.66	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-8(204-214)
Date:	8/29/18	Sampled By:	DW		
Sampling Time:	11:30	Recorded By:	DW		
Weather:	Sunny 90F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	204' to 214'		
Total Depth:	214.00	Pump intake depth:	204'		
Depth to Water:	59.65				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	11:15	Off:	
Gallons in Well:	0.41	PSI at 110	D/R at 15 sec / 1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:30	15	1600	0.42	0	-73	9.08	0.781	23.3		8.84	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-8A(47-57)
Date:		Sampled By:			
Sampling Time:		Recorded By:			
Weather:		Replicate/Split:			

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVc	Purge Method:	**ZIST System**
Casing Diameter:	1"	Screen Interval:	47' to 57'
Total Depth:	57.00	Pump intake depth:	47'
Depth to Water:	NA		
Water Column:	NA	Total Volume Purged:	none - dry
Gallons/Foot:	0.041	Pump on:	Off:
Gallons in Well:	0.41		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
		Well Dry- Not Sampled									

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	NA
Color:	NA	Turbidity(qualitative):	NA
Odor:	NA	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-9A(25-35)
Date:		Sampled By:			
Sampling Time:		Recorded By:			
Weather:		Replicate/Split:			

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST**
Casing Diameter:	1"	Screen Interval:	25' to 35'
Total Depth:	35.00	Pump intake depth:	30
Depth to Water:	18.30		
Water Column:		Total Volume Purged:	
Gallons/Foot:	0.041	Pump on:	Off:
Gallons in Well:	0.41		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
				Well Dry-Not Sampled							

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	NA
Color:	NA	Turbidity(qualitative):	NA
Odor:	NA	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-9A(85-95)
Date:	8/29/18	Sampled By:	DW		
Sampling Time:	14:20	Recorded By:	DW		
Weather:	Sunny 90 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	85' to 95'		
Total Depth:	95.00	Pump intake depth:	90		
Depth to Water:	56.75				
Water Column:	NA	Total Volume Purged:	800 ml		
Gallons/Foot:	0.041	Pump on:	14:00	Off:	
Gallons in Well:	0.41	PSI at 50 D/R 10 sec/1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:20	20	800	0.21	0.0	7.0	7.61	0.231	26.93		8.81	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-9(139-149)
Date:	8/29/18	Sampled By:	DW		
Sampling Time:	No Sample	Recorded By:	DW		
Weather:	Sunny 85 F, Solar Eclipse	Replicate/Split:			

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	139' to 149'		
Total Depth:	149'	Pump intake depth:	144		
Depth to Water:	58.43				
Water Column:	NA	Total Volume Purged:	800 ml		
Gallons/Foot:	0.041		15:00	Off:	
Gallons in Well:	0.41	PSI at 100	D/R 10 sec/1 min		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:15	15	1600	0.42	0.0	17.0	6.84	1.080	20.47		8.95	
				No Sample Taken- Not enough GW to sample							

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Note: Purged 800 ml, well dry. Attempt to sample next day, limited recharge, no sample taken.

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-9 (206-216)
Date:	8/29/18	Sampled By:	DW		
Sampling Time:	15:30	Recorded By:	DW		
Weather:	Sunny 90 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	206' to 216'		
Total Depth:	216"	Pump intake depth:	211		
Depth to Water:	41.75				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	15:15	Off:	
Gallons in Well:	0.41	PSI at 100 D/R 20 sec/1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:30	15.00	1600.00	0.42	0.00	70.00	8.44	1.09	22.05		9.08	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-10A(51-61)
Date:	8/28/18	Sampled By:	DW		
Sampling Time:	13:00	Recorded By:	DW		
Weather:	Sunny 88 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	51' to 61'		
Total Depth:	61.00	Pump intake depth:	56'		
Depth to Water:	34.19				
Water Column:	NA	Total Volume Purged:	1600ml		
Gallons/Foot:	0.041	Pump on:	12:40	Off:	
Gallons in Well:	0.41	PSI at 130 D/R 10 sec/ 1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (°C)	Depth to Water	Diss. Oxygen	Comments
13:00	20.00	1600	0.42	0.0	53.0	7.58	0.511	22.06		3.12	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-10A(75-85)
Date:	8/28/18	Sampled By:	DW		
Sampling Time:	13:20	Recorded By:	DW		
Weather:	Sunny, hot 88F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	75' to 85'		
Total Depth:	85.00	Pump intake depth:	80		
Depth to Water:	36.80				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	13:10	Off:	
Gallons in Well:	0.41	PSI at 60 D/R at 15 sec / 30 sec			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:20	10	1600	0.42	0.0	103.0	6.03	0.375	20.64		9.59	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Note: Purged on 8/22/17 and sampled on 8/23/17

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-10(120-130)
Date:	8/28/18	Sampled By:	DW CR		
Sampling Time:	14:20	Recorded By:	DW		
Weather:	Sunny 88 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	ZIST		
Casing Diameter:	1"	Screen Interval:	120' to 130'		
Total Depth:	130"	Pump intake depth:	125		
Depth to Water:	40.86				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	14:00	Off:	
Gallons in Well:	0.41	PSI at 80 D/R at 10 sec/1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:20	20	1600	0.42	0.0	-20.0	10.73	0.571	16.84		10.90	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Note: Purged 8/22/17 and sampled 8/23/17.

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-10(185-195)
Date:	8/28/18	Sampled By:	DW		
Sampling Time:	14:35	Recorded By:	DW		
Weather:	Sunny 89 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	185' to 195'		
Total Depth:	195'	Pump intake depth:	190		
Depth to Water:	39.29				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	14:25	Off:	
Gallons in Well:	0.41	PSI at 80 D/R 10 sec/ 1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:35	10	1600	0.42	0.0	41.0	10.03	0.374	16.05		10.93	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-11S(236-241)
Date:	8/31/18	Sampled By:	DW		
Sampling Time:	10:30	Recorded By:	DW		
Weather:	Cloudy 78 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	236' to 241'		
Total Depth:	241.00	Pump intake depth:	238.5		
Depth to Water:	16.10				
Water Column:	NA	Total Volume Purged:	800 ml		
Gallons/Foot:	0.041	Pump on:	10:20	Off:	
Gallons in Well:	0.41	PSI at 80 D/R at 10 sec/ 1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
10:20	10	800	0.21	0.0	-43.0	8.33	0.178	14.69		10.83	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-11D(262-267)
Date:	8/31/18	Sampled By:	DW		
Sampling Time:	10:15	Recorded By:	DW		
Weather:	Cloudy 78 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	262' to 267'		
Total Depth:	267'	Pump intake depth:	262'		
Depth to Water:	NA				
Water Column:	NA	Total Volume Purged:	800 ml		
Gallons/Foot:	0.041	Pump on:	10:05	Off:	
Gallons in Well:	0.41	PSI at 110 D/R at 10 sec/ 1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
10:15	10	400		0.0	-107.0	12.37	3.250	16.30		10.37	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-12(55-65)
Date:	8/29/18	Sampled By:	DW		
Sampling Time:	8:50	Recorded By:	DW		
Weather:	Sunny, hot, 89 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	55' to 65'		
Total Depth:	65.00	Pump intake depth:	60		
Depth to Water:	water at top of casing				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	8:35	Off:	
Gallons in Well:	0.41	PSI at 40 D/R at 15 sec/ 1 min.			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (°C)	Depth to Water	Diss. Oxygen	Comments
8:50	15	1600	0.42	0.0	-96.0	9.19	0.869	18.02		10.12	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-12(130-140)
Date:	8/29/18	Sampled By:	DW		
Sampling Time:	9:40	Recorded By:	DW		
Weather:	Sunnt,hot, 88F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	130' to 140'		
Total Depth:	140'	Pump intake depth:	135'		
Depth to Water:	Water at top of casing				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	9:30	Off:	
Gallons in Well:	0.41	PSI at 60 D/R at 10 sec/ 1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:40	10	1600	0.42	0.0	-22.0	7.86	0.129	18.25		4.77	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-13(71-91)
Date:	8/24/18	Sampled By:	DW		
Sampling Time:	10:15	Recorded By:	DW		
Weather:	Sunny 78 F	Replicate/Split:	DUP-03-082418		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUVJ2

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow bladder pump**
Casing Diameter:	2"	Screen Interval:	71' to 91'
Total Depth:	93.40	Pump intake depth:	81
Depth to Water:	11.93		
Water Column:	81.47	Total Volume Purged:	2.85 gallons
Gallons/Foot:	0.160	Pump on:	9:25 Off: 10:25
Gallons in Well:	13.04		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (°C)	Depth to Water	Diss. Oxygen	Comments
9:25	0	240	0.00	123.0	122.0	7.17	0.447	13.16	11.85	4.02	
9:30	5	240	0.32	110.00	148.0	6.82	0.467	12.73	11.90	2.00	
9:35	10	240	0.63	100.00	156.0	6.73	0.475	12.42	12.92	0.82	
9:40	15	240	0.95	85.50	154.0	6.75	0.473	12.20	13.31	0.55	
9:45	20	240	1.27	36.20	153.0	6.77	0.472	12.07	14.70	0.31	
9:50	25	240	1.59	22.10	152.0	6.78	0.466	12.09	15.50	0.26	
9:55	30	240	1.90	14.80	148.0	6.81	0.460	12.22	16.55	0.21	
10:00	35	240	2.22	14.40	143.0	6.82	0.453	12.36	17.45	0.19	
10:05	40	240	2.54	14.50	142.0	6.83	0.450	12.40	17.50	0.18	
10:10	45	240	2.85	14.10	139.0	6.83	0.448	12.49	17.56	0.17	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-13(100-120)
Date:	8/30/18	Sampled By:	DW		
Sampling Time:	12:10	Recorded By:	DW		
Weather:	Sunny 75 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FC4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST System**		
Casing Diameter:	1"	Screen Interval:	100' to 120'		
Total Depth:	120.00	Pump intake depth:	110		
Depth to Water:	Water at top of casing				
Water Column:	NA	Total Volume Purged:	3200 ml		
Gallons/Foot:	0.041	Pump on:	11:55	Off:	
Gallons in Well:	0.41	PSI at 50 D/R at 10 sec/ 1 min			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (°C)	Depth to Water	Diss. Oxygen	Comments
12:10	15.00		0.85	281.00	-39.00	10.83	0.84	22.89		8.64	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-13(150-170)
Date:	8/30/18	Sampled By:	DW		
Sampling Time:	11:25	Recorded By:	DW		
Weather:	Sunny 87 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FC4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	150' to 170'		
Total Depth:	170.00	Pump intake depth:	160		
Depth to Water:	Water at top of casing				
Water Column:	NA	Total Volume Purged:	3200 ml		
Gallons/Foot:	0.041	Pump on:	11:20	Off:	11:45
Gallons in Well:	0.41	PSI at 70 D/R at 10 sec/ 1 min.			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:25	0		0.85	0.0	-59.0	7.71	0.243	20.32		11.77	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-14S(135-155)
Date:	8/31/18	Sampled By:	DW		
Sampling Time:	12:15	Recorded By:	DW		
Weather:	Rain 78F	Replicate/Split:	MS/MSD		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	135 to 155		
Total Depth:	155.00	Pump intake depth:	145		
Depth to Water:	10.22				
Water Column:	NA	Total Volume Purged:	3200 ml		
Gallons/Foot:	0.041	Pump on:	12:05	Off:	
Gallons in Well:	0.41	PSI at 70 D/R at 10 sec/ 1 min.			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
12:15	10	3200	0.85	0.0	-30.0	7.62	0.450	15.08		11.86	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW14D (175-185)
Date:	8/31/18	Sampled By:	DW		
Sampling Time:	12:40	Recorded By:	DW		
Weather:	Rain 78 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	175 to 185		
Total Depth:	195.00	Pump intake depth:	180		
Depth to Water:	1.07				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	12:30	Off:	
Gallons in Well:	0.41	PSI at 70 D/R at 10 sec/ 1 min.			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
12:40	10	1600	0.42	0.0	-106.0	7.49	0.779	17.28		10.68	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-15S(110-120)
Date:	8/31/18	Sampled By:	DW		
Sampling Time:	13:20	Recorded By:	DW		
Weather:	Rain 78F	Replicate/Split:	**Dup04-083118**		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	110 to 120		
Total Depth:	120.00	Pump intake depth:	115		
Depth to Water:	9.63				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	13:10	Off:	
Gallons in Well:	0.41	PSI at 70 D/R at 10 sec/ 1 min.			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (°C)	Depth to Water	Diss. Oxygen	Comments
13:20	10	1600	0.42	0.0	-151.0	9.23	0.433	15.27		11.15	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-15D(127-137)
Date:	8/31/18	Sampled By:	DW		
Sampling Time:	14:00	Recorded By:	DW		
Weather:	Rain 78 F	Replicate/Split:	**None**		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	VM6FCT4T3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**ZIST system**		
Casing Diameter:	1"	Screen Interval:	127 to 137		
Total Depth:	137.00	Pump intake depth:	132		
Depth to Water:	9.00				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	13:50	Off:	
Gallons in Well:	0.41	PSI at 70 D/R at 10 sec/ 1 min.			

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
14:00	10	1600	0.42	0.0	-225.0	11.49	1.010	14.72		11.49	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Low
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	RW-16
Date:	8/21/18	Sampled By:	DW		
Sampling Time:	16:45	Recorded By:	DW		
Weather:	Mostly cloudy 80 F	Replicate/Split:	**NA**		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUV2J

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder**		
Casing Diameter:	1"	Screen Interval:	52-62		
Total Depth:	62.00	Pump intake depth:	58		
Depth to Water:	4.95				
Water Column:	57.05	Total Volume Purged:	3.8 gallons		
Gallons/Foot:	0.160	Pump on:	16:00	Off:	16:55
Gallons in Well:	9.13				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (°C)	Depth to Water	Diss. Oxygen	Comments
16:00	0	320	0.00	7.3	39.0	6.93	0.575	14.69	4.90	2.67	
16:05	5	320	0.42	0.00	75.0	6.71	0.581	13.00	4.90	0.44	
16:10	10	320	0.85	0.00	79.0	6.70	0.581	12.78	4.90	0.39	
16:15	15	320	1.27	0.00	81.0	6.71	0.582	12.64	4.90	0.27	
16:20	20	320	1.69	0.00	82.0	6.72	0.582	12.60	4.90	0.25	
16:25	25	320	2.11	0.00	86.0	6.70	0.582	12.57	4.90	0.18	
16:30	30	320	2.54	0.00	87.0	6.68	0.583	12.50	4.90	0.20	
16:35	35	320	2.96	0.00	83.0	6.70	0.582	12.47	4.90	0.22	
16:40	40	320	3.38	0.00	86.0	6.68	0.582	12.42	4.90	0.20	
16:45	45	320	3.80	0.00	85.0	6.70	0.582	12.45	4.90	0.18	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	SC-1
Date:	8/24/18	Sampled By:	RJL, EB		
Sampling Time:	15:00	Recorded By:	RJL, EB		
Weather:	Sunny 85 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**
Casing Diameter:	2"	Screen Interval:	99' to 109' (angled)
Total Depth:	111.00	Pump intake depth:	105
Depth to Water:	14.08		
Water Column:	96.92	Total Volume Purged:	4.23 gallons
Gallons/Foot:	0.160	Pump on:	12:08 Off: 13:00
Gallons in Well:	15.51		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
12:10	0	400	0.00	34.9	-10.0	6.24	0.179	19.21	14.10	4.40	
12:15	5	400	0.53	40.70	8.0	6.13	0.231	18.14	14.15	1.38	
12:20	10	400	1.06	42.10	8.0	6.13	0.227	17.99	14.17	1.15	
12:25	15	400	1.59	40.40	7.0	6.12	0.248	17.84	14.17	0.83	
12:30	20	400	2.11	29.80	4.0	6.14	0.250	17.79	14.17	0.62	
12:35	25	400	2.64	24.30	3.0	6.13	0.249	17.78	14.17	0.47	
12:40	30	400	3.17	30.90	3.0	6.20	0.249	18.00	14.17	0.44	
12:45	35	400	3.70	31.40	7.0	6.05	0.247	18.12	14.17	0.34	
12:50	40	400	4.23	30.90	5.0	6.06	0.264	18.93	14.17	0.33	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	SC-1
Date:	9/5/18	Sampled By:	EB		
Sampling Time:	14:40	Recorded By:	EB		
Weather:	Sunny 90 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	PF9RNCK8

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow Bladder pump**		
Casing Diameter:	2"	Screen Interval:	99' to 109' (angled)		
Total Depth:	111.00	Pump intake depth:	105		
Depth to Water:	14.60				
Water Column:	96.40	Total Volume Purged:	2.4 gallons		
Gallons/Foot:	0.160	Pump on:	13:42	Off:	14:45
Gallons in Well:	15.42				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
13:50	0	180	0.00	39.8	-15.0	9.54	0.316	17.00	14.60	0.44	
13:55	5	180	0.24	35.9	-9.0	9.60	0.305	16.30	14.65	0.26	
14:00	10	180	0.48	36.8	-10.0	9.64	0.304	15.79	14.65	0.24	
14:05	15	180	0.71	14.5	-10.0	9.70	0.315	14.90	14.65	0.26	
14:10	20	180	0.95	13.6	-7.0	9.72	0.320	14.90	14.65	0.10	
14:15	25	180	1.19	15.6	-6.0	9.76	0.321	14.65	14.65	0.09	
14:20	30	180	1.43	18.1	-5.0	9.76	0.323	14.69	14.65	0.06	
14:25	35	180	1.66	11.9	-2.0	9.82	0.326	14.15	14.65	0.01	
14:30	40	180	1.90	4.8	-3.0	9.84	0.328	14.00	14.65	0.00	
14:35	45	180	2.14	6.0	-3.0	9.87	0.329	13.91	14.65	0.00	
14:40	50	180	2.4	7.0	-4.0	9.96	0.331	13.88	14.65	0.01	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	SC-2
Date:	8/23/18	Sampled By:	DW		
Sampling Time:	15:50	Recorded By:	DW		
Weather:	Sunny 85 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	5XLBUV2J

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	**Low Flow bladder Pump**
Casing Diameter:	2"	Screen Interval:	47' to 67'
Total Depth:	69.75	Pump intake depth:	66'
Depth to Water:	56.60		
Water Column:	13.15	Total Volume Purged:	3.80 gallons
Gallons/Foot:	0.160	Pump on:	15:05 Off: 16:05
Gallons in Well:	2.10		

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
15:05	0	320	0.00	44.0	152.0	6.56	0.567	16.64	56.60	2.29	
15:10	5	320	0.42	32.30	153.0	6.57	0.565	1.00	57.05	2.00	
15:15	10	320	0.85	26.50	154.0	6.58	0.564	15.45	57.50	1.67	
15:20	15	320	1.27	28.10	158.0	6.60	0.560	15.00	58.10	1.58	
15:25	20	320	1.69	30.50	164.0	6.63	0.559	14.50	58.90	1.43	
15:30	25	320	2.11	32.80	165.0	6.62	0.562	14.47	59.43	1.51	
15:35	30	320	2.54	35.50	167.0	6.62	0.566	14.44	59.60	1.67	
15:40	35	320	2.96	34.00	168.0	6.64	0.565	14.46	59.75	1.58	
15:45	40	320	3.38	33.80	169.0	6.64	0.650	14.43	59.80	1.52	
15:50	45	320	3.80	33.40	170.0	6.63	0.564	14.41	59.84	1.48	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	Cannon Mine Shaft-50
Date:	8/23/18	Sampled By:	JG, EB		
Sampling Time:	9:15	Recorded By:	JG, EB		
Weather:	Sunny 80 F	Replicate/Split:	MS/MSD		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Grundfos 2" Low Flow- drop down pump**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	275.00	Pump intake depth:	50		
Depth to Water:	7.96				
Water Column:	265	Total Volume Purged:	4.62 gallons		
Gallons/Foot:	NA	Pump on:	8:40	Off:	9:40
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
8:40	0	500	0.00	52.5	-90.0	6.87	0.871	14.32	7.96	2.09	
8:45	5	500	0.66	49.10	-87.0	6.87	0.872	13.11	7.96	2.05	
8:50	10	500	1.32	46.30	-83.0	6.87	0.872	12.41	7.96	1.97	
8:55	15	500	1.98	44.80	-63.0	6.78	0.861	12.54	7.96	1.46	
9:00	20	500	2.64	45.90	-64.0	6.78	0.860	12.52	7.96	1.34	
9:05	25	500	3.30	43.20	-64.0	6.78	0.859	12.46	7.96	1.27	
9:10	30	500	3.96	46.80	-65.0	6.82	0.855	12.44	7.96	1.23	
9:15	35	500	4.62	45.40	-65.0	6.80	0.854	12.47	7.96	1.17	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	Cannon Mine Shaft-50
Date:	9/53/2018	Sampled By:	CR, DW		
Sampling Time:	10:10	Recorded By:	CR, DW		
Weather:	Sunny 80 F	Replicate/Split:	MS/MSD		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Grundfos 2" Low Flow- drop down pump**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	275.00	Pump intake depth:	50		
Depth to Water:	8.24				
Water Column:	265	Total Volume Purged:	10.57 gallons		
Gallons/Foot:	NA	Pump on:	8:50	Off:	10:15
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
8:50	0	500	0.00	54.9	-73.0	6.93	0.930	13.03	8.24	8.20	
8:55	5	500	0.66	53.2	-75.0	6.80	0.930	12.80	8.30	6.20	
9:00	10	500	1.32	52.3	-80.0	6.79	0.915	12.82	8.30	4.74	
9:05	15	500	1.98	57.1	-81.0	6.78	0.906	12.88	8.30	4.14	
9:10	20	500	2.64	61.3	-85.0	6.81	0.901	12.92	8.30	3.67	
9:15	25	500	3.30	79.0	-93.0	6.87	0.905	12.72	8.30	0.43	
9:20	30	500	3.96	61.0	-97.0	6.94	0.902	12.79	8.30	0.42	
9:25	35	500	4.62	62.1	-101.0	6.96	0.903	12.82	8.30	0.17	
9:30	40	500	5.28	68.3	-103.0	6.98	0.900	12.88	8.30	0.01	
9:35	45	500	5.94	60.6	-104.0	6.99	0.905	12.85	8.30	0.10	
9:40	50	500	6.60	72.8	-58.0	6.88	0.924	12.91	8.30	5.96	
9:45	55	500	7.26	73.3	-56.0	6.87	0.924	12.92	8.30	5.63	
9:50	60	500	7.93	58.4	-54.0	6.86	0.918	13.03	8.30	4.50	
9:55	65	500	8.59	57.2	-52.0	6.83	0.916	13.05	8.30	4.31	
10:00	70	500	9.25	46.4	-54.0	6.85	0.915	12.99	8.30	4.28	
10:05	75	500	9.91	46.1	-58.0	6.89	0.915	13	8.30	4.25	
10:10	80	500	10.57	45.3	-57.0	6.88	0.915	13	8.30	4.29	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	Cannon Mine Shaft-100
Date:	8/23/18	Sampled By:	JG, EB		
Sampling Time:	10:15	Recorded By:	JG, EB		
Weather:	Sunny 80 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Grundfos 2" Low Flow- drop down pump**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	275.00	Pump intake depth:	100		
Depth to Water:	7.96				
Water Column:	265	Total Volume Purged:	4.62 gallon		
Gallons/Foot:	NA	Pump on:	9:40	Off:	10:25
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:40	0	500	0.00	21.5	-149.0	7.27	0.939	13.10	7.96	14.08	
9:45	5	500	0.66	23.90	-150.0	7.27	0.939	12.66	7.96	10.25	
9:50	10	500	1.32	30.00	-166.0	7.35	0.909	12.62	7.96	7.11	
9:55	15	500	1.98	42.30	-150.0	7.22	0.898	12.63	7.96	6.50	
10:00	20	500	2.64	43.70	-129.0	7.11	0.895	12.62	7.96	5.42	
10:05	25	500	3.30	44.60	-120.0	7.06	0.890	12.63	7.96	4.80	
10:10	30	500	3.96	44.00	-114.0	7.03	0.893	12.70	7.96	4.57	
10:15	35	500	4.62	46.20	-109.0	7.09	0.892	12.73	7.96	4.34	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	Cannon Mine Shaft-100
Date:	9/5/18	Sampled By:	CR, DW		
Sampling Time:	11:05	Recorded By:	CR, DW		
Weather:	Sunny 80 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Grundfos 2" Low Flow- drop down pump**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	275.00	Pump intake depth:	100		
Depth to Water:	8.30				
Water Column:	265	Total Volume Purged:	5.94 gallon		
Gallons/Foot:	NA	Pump on:	10:20	Off:	11:15
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
10:20	0	500	0.00	50.4	-113.0	7.27	0.997	12.95	8.30	0.00	
10:25	5	500	0.66	57.5	-129.0	7.43	0.989	13.28	8.30	7.91	
10:30	10	500	1.32	54.9	-131.0	7.38	0.966	13.20	8.30	5.73	
10:35	15	500	1.98	52.3	-117.0	7.25	0.946	13.21	8.30	4.65	
10:40	20	500	2.64	50.6	-115.0	7.24	0.943	13.21	8.30	4.47	
10:45	25	500	3.30	48.3	-111.0	7.20	0.934	13.27	8.30	4.06	
10:50	30	500	3.96	48.6	-105.0	7.15	0.919	13.42	8.30	3.37	
10:55	35	500	4.62	48.0	-104.0	7.15	0.910	13.28	8.30	3.81	
11:00	40	500	5.28	47.6	-104.0	7.15	0.918	13.31	8.30	3.55	
11:05	45	500	5.94	47.0	-104.0	7.14	0.912	13.35	8.30	3.16	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	Cannon Mine Shaft-160
Date:	8/23/18	Sampled By:	JG, EB		
Sampling Time:	11:35	Recorded By:	JG, EB		
Weather:	Sunny 80 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Grundfos 2" Low Flow- drop down pump**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	275.00	Pump intake depth:	160		
Depth to Water:	7.96				
Water Column:	265	Total Volume Purged:	4.62 gallons		
Gallons/Foot:	NA	Pump on:	11:00	Off:	11:45
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:00	0	500	0.00	65.5	-97.0	7.04	1.010	13.52	7.96	4.30	
11:05	5	500	0.66	9.30	-148.0	7.26	1.030	12.93	7.96	1.95	
11:10	10	500	1.32	10.60	-147.0	7.21	1.030	12.82	7.96	1.69	
11:15	15	500	1.98	10.90	-149.0	7.23	1.030	12.82	7.96	1.13	
11:20	20	500	2.64	12.70	-150.0	7.23	1.020	12.95	7.96	0.90	
11:25	25	500	3.30	13.80	-149.0	7.23	1.010	13.07	7.96	0.78	
11:30	30	500	3.96	15.10	-147.0	7.19	0.997	13.14	7.96	0.69	
11:35	35	500	4.62	14.60	-145.0	7.17	0.995	13.18	7.96	0.62	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	Cannon Mine Shaft-160
Date:	9/5/18	Sampled By:	CR, DW		
Sampling Time:	12:05	Recorded By:	CR, DW		
Weather:	Sunny 80 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Grundfos 2" Low Flow- drop down pump**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	275.00	Pump intake depth:	160		
Depth to Water:	8.30				
Water Column:	265	Total Volume Purged:	4.62 gallons		
Gallons/Foot:	NA	Pump on:	11:30	Off:	12:10
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
11:30	0	500	0.00	45.8	-105.0	7.23	1.090	13.29	8.30	0.00	
11:35	5	500	0.66	45.9	-110.0	7.20	1.070	13.13	8.30	0.00	
11:40	10	500	1.32	46.4	-112.0	7.21	1.050	13.17	8.30	0.00	
11:45	15	500	1.98	45.2	-116.0	7.26	1.030	13.01	8.30	0.00	
11:50	20	500	2.64	45.8	-121.0	7.29	1.010	13.05	8.30	0.00	
11:55	25	500	3.30	45.0	-121.0	7.28	1.010	13.07	8.30	0.00	
12:00	30	500	3.96	45.9	-121.0	7.27	1.010	13.02	8.30	0.00	
12:05	35	500	4.62	44.7	-119.0	7.28	1.010	12.99	8.30	0.00	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	Cannon Mine Shaft-275
Date:	8/22/18	Sampled By:	JG, EB		
Sampling Time:	12:45	Recorded By:	JG, EB		
Weather:	Sunny 80 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Grundfos 2" Low Flow- drop down pump**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	275.00	Pump intake depth:	275		
Depth to Water:	7.69				
Water Column:	265	Total Volume Purged:	5.28 gallons		
Gallons/Foot:	NA	Pump on:	12:00	Off:	12:55
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
12:05	5	500	0.66	1000.0	-104.0	6.89	0.817	15.64	7.69	2.16	
12:10	10	500	1.32	324.00	-84.0	6.88	0.817	14.75	7.69	1.66	
12:15	15	500	1.98	104.00	-104.0	6.97	0.853	14.86	7.69	1.04	
12:20	20	500	2.64	64.90	-104.0	6.96	0.836	15.28	7.69	0.81	
12:25	25	500	3.30	50.20	-101.0	6.94	0.824	15.33	7.69	0.62	
12:30	30	500	3.96	36.40	-96.0	7.02	0.809	15.17	7.69	0.54	
12:35	35	500	4.62	29.50	-95.0	6.93	0.814	15.09	7.69	0.41	
12:40	40	500	5.28	26.70	-94.0	6.95	0.821	15.27	7.69	0.37	
12:45	45	500	5.94	26.80	-94.0	6.92	0.809	15.12	7.69	0.32	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	Cannon Mine Shaft-275
Date:	9/5/18	Sampled By:	CR, DW		
Sampling Time:	13:00	Recorded By:	CR, DW		
Weather:	Sunny 83 F	Replicate/Split:	none		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	steel	Purge Method:	**Grundfos 2" Low Flow- drop down pump**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	275.00	Pump intake depth:	275		
Depth to Water:	8.30				
Water Column:	265	Total Volume Purged:	5.28 gallons		
Gallons/Foot:	NA	Pump on:	12:20	Off:	13:10
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
12:20	0	500	0.00	88.9	-102.0	7.2	1.000	14.53	8.30	0.01	
12:25	5	500	0.66	5.1	-96.0	7.08	0.847	14.15	8.30	0.00	
12:30	10	500	1.32	7.4	-95.0	7.16	0.845	14.09	8.30	0.00	
12:35	15	500	1.98	3.3	-94.0	7.08	0.838	14.08	8.30	0.00	
12:40	20	500	2.64	4.7	-93.0	7.07	0.832	14.14	8.30	0.37	
12:45	25	500	3.30	2.9	-93.0	7.07	0.828	14.07	8.30	1.09	
12:50	30	500	3.96	3.1	-93.0	7.07	0.823	14.06	8.30	0.78	
12:55	35	500	4.62	3.4	-93.0	7.07	0.819	14.05	8.30	0.52	
13:00	40	500	5.28	3.2	-94.0	7.07	0.825	14.04	8.30	0.49	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	Peters Mine Shaft-50
Date:	8/24/18	Sampled By:	JG		
Sampling Time:	8:50	Recorded By:	JG		
Weather:	Sunny, 65 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	Steel	Purge Method:	**Grundfos 2" Low Flow**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	230.00	Pump intake depth:	50		
Depth to Water:	8.10				
Water Column:	221.90	Total Volume Purged:	4.62 gallons		
Gallons/Foot:	NA	Pump on:	8:15	Off:	9:00
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
8:15	0	500	0.00	79.6	-53.0	6.79	0.062	17.74	8.10	4.94	
8:20	5	500	0.66	53.2	45.0	6.27	0.054	17.77	8.10	5.35	
8:25	10	500	1.32	24.9	91.0	6.04	0.056	17.79	8.10	5.59	
8:30	15	500	1.98	23.7	101.0	5.88	0.053	17.79	8.10	5.46	
8:35	20	500	2.64	21.5	99.0	5.83	0.053	17.87	8.10	5.37	
8:40	25	500	3.30	20.5	98.0	5.82	0.053	17.82	8.10	5.30	
8:45	30	500	3.96	19.6	96.0	5.82	0.054	17.83	8.10	5.27	
8:50	35	500	4.62	19.1	93.0	5.82	0.054	17.84	8.10	5.29	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	Clear
Odor:	None	Other (OVA, HNU,etc.):	NA

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	Peters Mine Shaft-180
Date:	8/24/18	Sampled By:	JG		
Sampling Time:	9:40	Recorded By:	JG		
Weather:	Sunny 70 F	Replicate/Split:	None		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	Steel	Purge Method:	**Grundfos 2" Low Flow**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	230.00	Pump intake depth:	180		
Depth to Water:	8.10				
Water Column:	221.90	Total Volume Purged:	3.96 gallons		
Gallons/Foot:	NA	Pump on:	9:10	Off:	9:50
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
9:10	0	500	0.00	44.5	-84.0	6.17	0.505	17.84	8.10	1.06	
9:15	5	500	0.66	59.7	-101.0	6.31	0.643	16.91	8.10	0.53	
9:20	10	500	1.32	47.8	-95.0	6.32	0.633	16.43	8.10	0.41	
9:25	15	500	1.98	42.6	-99.0	6.37	0.627	16.44	8.10	0.33	
9:30	20	500	2.64	41.7	-97.0	6.38	0.628	16.44	8.10	0.25	
9:35	25	500	3.30	40.6	-98.0	6.37	0.625	16.37	8.10	0.23	
9:40	30	500	3.96	39.8	-99.0	6.39	0.619	16.27	8.10	0.19	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	clear
Odor:	Slight odor	Other (OVA, HNU,etc.):	effervescent

Cornerstone
Groundwater Sampling Form

Project Number:	180361	Task:	006	Well ID:	Peters Mine Shaft-230
Date:	8/24/18	Sampled By:	JG		
Sampling Time:	23:15	Recorded By:	JG		
Weather:	Sunny 75 F	Replicate/Split:	MS/MSD		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	KP5XP8NP

PURGING INFORMATION

Casing Material:	Steel	Purge Method:	**Grundfos 2" Low Flow**		
Casing Diameter:	2"	Screen Interval:			
Total Depth:	230.00	Pump intake depth:	230		
Depth to Water:	8.10				
Water Column:	221.90	Total Volume Purged:	4.62 gallons		
Gallons/Foot:	NA	Pump on:	10:40	Off:	11:35
Gallons in Well:	NA				

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (ºC)	Depth to Water	Diss. Oxygen	Comments
10:40	0	500	0.00	179.00	-87.0	6.46	0.905	14.67	8.10	0.60	
10:45	5	500	0.66	118.00	-91.0	6.52	0.951	15.17	8.10	0.46	
10:50	10	500	1.32	63.40	-91.0	6.48	0.942	15.11	8.10	0.36	
10:55	15	500	1.98	51.30	-94.0	6.50	0.963	15.15	8.10	0.27	
11:00	20	500	2.64	43.80	-95.0	6.50	0.977	15.17	8.10	0.22	
11:05	25	500	3.30	38.70	-97.0	6.51	0.968	15.14	8.10	0.18	
11:10	30	500	3.96	35.60	-99.0	6.51	0.979	15.10	8.10	0.16	
11:15	35	500	4.62	33.20	-101.0	6.51	0.974	15.08	8.10	0.13	

OBSERVATIONS DURING SAMPLING

Well Condition:	Good	Purge Water Disposal:	Contained
Color:	Clear	Turbidity(qualitative):	clear
Odor:	slight odor	Other (OVA, HNU,etc.):	None

ATTACHMENT C

LABORATORY REPORTS (ON COMPACT DISC)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-163149-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Dr. Tim Roeper

Authorized for release by:
8/31/2018 9:00:35 AM

Marie Meidhof, Senior Project Manager
(732)549-3900
marie.meidhof@testamericainc.com

LINKS

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

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
U	Indicates the analyte was analyzed for but not detected.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-163149-1

Laboratory: TestAmerica Edison

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 460-163149-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 8/22/2018 4:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 7 coolers at receipt time were 0.5º C, 0.7º C, 0.8º C, 0.8º C, 0.9º C, 1.1º C and 2.7º C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4), OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14), TB-01-082218 (460-163149-15), OB-23-082118 (460-163149-16), OB-3-082218 (460-163149-17) and OB-24-082218 (460-163149-18) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C DKQP. The samples were analyzed on 08/26/2018 and 08/27/2018.

The continuing calibration verification (CCV) analyzed in batch 460-547593 was outside the method criteria for the following analytes: 1,2,3-Trichlorobenzene(biased low), Chloroethane and Methyl acetate(biased high). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes are considered estimated.

The CCV analyzed in batch 460-547498 was outside the method criteria for the following analytes: 1,2,3-Trichlorobenzene (biased low); Chloroethane and Methyl acetate (biased high). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The laboratory control sample duplicate (LCSD) for analytical batch 460-547593 recovered outside control limits for the following analyte: Methyl acetate. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

Job ID: 460-163149-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 460-547498 recovered outside control limits for the following analyte: Methyl acetate. This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

Methyl acetate failed the recovery criteria high for the matrix spike (MS) of sample OB-7-082118 (460-163149-2) in batch 460-547498.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) DKQP

Samples OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4), OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14), OB-23-082118 (460-163149-16), OB-3-082218 (460-163149-17) and OB-24-082218 (460-163149-18) were analyzed for Semivolatile organic compounds (GC/MS) DKQP in accordance with EPA SW-846 Method 8270D DKQP. The samples were prepared on 08/25/2018 and analyzed on 08/25/2018 and 08/26/2018.

The LCS associated with preparation batch 460-547339 and analytical batch 460-547427 was outside DKQP recovery criteria but with laboratory generated limits for the following analyte: 2-Methylphenol. The data has been reported. 2-Methylphenol failed the recovery criteria low for LCS 460-547339/2-A.

The LCS associated with preparation batch 460-547376 and analytical batch 460-547472 was outside DKQP recovery criteria but with laboratory generated limits for the following analyte: 2-Methylphenol. The data has been reported. 2-Methylphenol failed the recovery criteria low for LCS 460-547376/2-A.

The LCS associated with preparation batch 460-547376 and analytical batch 460-547472 was outside DKQP recovery criteria but with laboratory generated limits for the following analyte: 2- Caprolactam. The data has been reported. Caprolactam failed the recovery criteria low for LCS 460-547376/3-A.

Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: OB-25-082118 (460-163149-1), OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10) and RW-16-082118 (460-163149-11), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14) and OB-3-082218 (460-163149-17). . These results have been reported and qualified.

The surrogate recovery for the blank associated with preparation batch 460-547376 and analytical batch 460-547472 was outside the upper control limits.

The following laboratory control sample (LCS) associated with batch 460-547376 contained one acid/base surrogate outside acceptance limits:(LCS 460-547376/2-A). The laboratory's SOP allows one acid and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified. 2,4,6-Tribromophenol (Surr) failed the surrogate recovery criteria high for LCS 460-547376/2-A.

2-Methylphenol and Caprolactam failed the recovery criteria low for the matrix spike (MS) and matrix spike duplicate (MSD) of sample OB-7-082118 (460-163149-2) in batch 460-547427.

2-Methylphenol, 3,3'-Dichlorobenzidine and Caprolactam failed the recovery criteria low for the MS of sample 460-163182-2 in batch 460-547472. 2-Methylphenol failed the recovery criteria low for the MSD of sample 460-163182-2 in batch 460-547472.

Job ID: 460-163149-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

3,3'-Dichlorobenzidine exceeded the RPD limit.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM)

Samples OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4), OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14), OB-23-082118 (460-163149-16), OB-3-082218 (460-163149-17) and OB-24-082218 (460-163149-18) were analyzed for semivolatile organic compounds - Selected Ion Mode (SIM) in accordance with EPA Method 8270C SIM DKQP. The samples were prepared on 08/25/2018 and analyzed on 08/26/2018 and 08/27/2018.

The CCV analyzed in 460-547488 was outside the method criteria for the following analyte(s): Bis(2-chloroethyl)ether, Hexachlorobenzene and Pentachlorophenol. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The CCV associated with batch 460-547560 recovered above the upper control limit for Dibenz(a,h)anthracene, Indeno[1,2,3-cd]pyrene and Pentachlorophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The CCV analyzed in 460-547693 was outside the method criteria for the following analytes: Benzo[b]fluoranthene, Benzo[a]pyrene and Dibenz(a,h)anthracene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The LCS and LCSD for preparation batch 460-547376 and analytical batch 460-547488 recovered outside control limits for the following analyte: Hexachlorobenzene. This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

The LCS for preparation batch 460-547339 and analytical batch 460-547560 recovered outside control limits for the following analyte: Dibenz(a,h)anthracene. The LCSD recovery was within limits; therefore, the data have been reported. Dibenz(a,h)anthracene failed the recovery criteria high for LCS 460-547339/4-A.

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 460-547339 and analytical batch 460-547560 recovered outside control limits for the following analyte: Pentachlorophenol.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

1,4 DIOXANE BY 8270D SIM, ISOTOPE DILUTION

Samples OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4), OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14), OB-23-082118 (460-163149-16), OB-3-082218 (460-163149-17) and OB-24-082218 (460-163149-18) were analyzed for 1,4 Dioxane by 8270D SIM, Isotope Dilution in accordance with EPA SW-846 Method 8270D SIM. The samples were prepared and analyzed on 08/24/2018.

No difficulties were encountered during the 1,4 Dioxane analysis.

Job ID: 460-163149-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

All quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS) - SELECTED ION MODE (SIM) DKQP

Samples OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4), OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14), TB-01-082218 (460-163149-15), OB-23-082118 (460-163149-16), OB-3-082218 (460-163149-17) and OB-24-082218 (460-163149-18) were analyzed for volatile organic compounds (GC-MS) - Selected Ion Mode (SIM) DKQP in accordance with EPA SW-846 Method 8260C SIM DKQP. The samples were analyzed on 08/24/2018.

No difficulties were encountered during the VOA SIM DKQP analysis.

All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS) DKQP

Samples OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4), OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14), OB-23-082118 (460-163149-16), OB-3-082218 (460-163149-17) and OB-24-082218 (460-163149-18) were analyzed for polychlorinated biphenyls (PCBs) DKQP in accordance with EPA SW-846 Method 8082A DKQP. The samples were prepared on 08/24/2018 and analyzed on 08/25/2018 and 08/26/2018.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICP/MS)

Samples OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4), OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14), OB-23-082118 (460-163149-16), OB-3-082218 (460-163149-17) and OB-24-082218 (460-163149-18) were analyzed for Dissolved Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared on 08/25/2018 and 08/27/2018 and analyzed on 08/25/2018, 08/27/2018 and 08/30/2018.

Calcium, Magnesium, Manganese and Sodium failed the recovery criteria high for the MS of sample OB-7-082118 (460-163149-2) in batch 460-547435.

Refer to the QC report for details.

Dissolved metals results for the following sample are greater than the corresponding total metals results for sodium: OB-18-082118 (460-163149-6). The dissolved metals results have been confirmed by the analysis of the undigested sample.

Samples OB-25-082118 (460-163149-1)[2X], OB-7-082118 (460-163149-2)[2X], OB-6-082118 (460-163149-3)[2X], OB-4-082118 (460-163149-4)[2X], OB-16-082118 (460-163149-5)[2X], OB-18-082118 (460-163149-6)[2X], OB-17-082118 (460-163149-7)[2X], Dup-01-082118 (460-163149-8)[2X], OB-28-082118 (460-163149-9)[2X], OB-22-082118 (460-163149-10)[2X], RW-16-082118 (460-163149-11)[2X], OB-14A-082118 (460-163149-12)[2X], OB-14B-082118 (460-163149-13)[2X], FB-01-082118 (460-163149-14)[2X], OB-23-082118 (460-163149-16)[2X], OB-3-082218 (460-163149-17)[2X] and OB-24-082218 (460-163149-18)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Dissolved Metals analysis.

All other quality control parameters were within the acceptance limits.

METALS (ICP/MS)

Samples OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4),

Job ID: 460-163149-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14), OB-23-082118 (460-163149-16), OB-3-082218 (460-163149-17) and OB-24-082218 (460-163149-18) were analyzed for Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared and analyzed on 08/28/2018.

The method blank for preparation batch 460-548003 and 460-548003 and analytical batch 460-548089 contained antimony above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction and re-analysis of samples was not performed.

Calcium failed the recovery criteria high for the MS of sample OB-7-082118 (460-163149-2) in batch 460-548089.

Antimony exceeded the RPD limit for the duplicate of sample OB-7-082118 (460-163149-2).

Refer to the QC report for details.

The field blank has a result for sodium greater than the reporting limit (RL). This was confirmed by analysis of the undigested sample bottle, therefore the result is reported: FB-01-082118 (460-163149-14).

No other difficulties were encountered during the Metals DKQP analysis.

All other quality control parameters were within the acceptance limits.

MERCURY DKQP

Samples OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4), OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14), OB-23-082118 (460-163149-16), OB-3-082218 (460-163149-17) and OB-24-082218 (460-163149-18) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 08/27/2018.

No difficulties were encountered during the dissolved Hg analysis.

All quality control parameters were within the acceptance limits.

MERCURY DKQP

Samples OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4), OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14), OB-23-082118 (460-163149-16), OB-3-082218 (460-163149-17) and OB-24-082218 (460-163149-18) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 08/24/2018.

No difficulties were encountered during the Hg analysis.

All quality control parameters were within the acceptance limits.

ANIONS

Samples OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4), OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14), OB-23-082118 (460-163149-16), OB-3-082218 (460-163149-17) and OB-24-082218 (460-163149-18) were analyzed for anions in accordance with EPA SW-846 Method 9056. The samples were analyzed on 08/26/2018 and 08/27/2018.

Job ID: 460-163149-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Chloride failed the recovery criteria low for the MS and MSD of sample OB-7-082118 (460-163149-2) in batch 460-547688.

Chloride failed the recovery criteria high for the MSD of sample OB-18-082118 (460-163149-6) in batch 460-547536.

Refer to the QC report for details.

The following samples were diluted to bring the concentration of target analytes within the calibration range: OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-7-082118 (460-163149-2[MS]), OB-7-082118 (460-163149-2[MSD]), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4), OB-16-082118 (460-163149-5), OB-17-082118 (460-163149-7), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), OB-23-082118 (460-163149-16), OB-24-082218 (460-163149-18) and (460-163149-E-2 DU). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the anions analysis.

All other quality control parameters were within the acceptance limits.

ALKALINITY

Samples OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4), OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14), OB-23-082118 (460-163149-16), OB-3-082218 (460-163149-17) and OB-24-082218 (460-163149-18) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/24/2018.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

TOTAL CYANIDE

Samples OB-25-082118 (460-163149-1), OB-7-082118 (460-163149-2), OB-6-082118 (460-163149-3), OB-4-082118 (460-163149-4), OB-16-082118 (460-163149-5), OB-18-082118 (460-163149-6), OB-17-082118 (460-163149-7), Dup-01-082118 (460-163149-8), OB-28-082118 (460-163149-9), OB-22-082118 (460-163149-10), RW-16-082118 (460-163149-11), OB-14A-082118 (460-163149-12), OB-14B-082118 (460-163149-13), FB-01-082118 (460-163149-14), OB-23-082118 (460-163149-16), OB-3-082218 (460-163149-17) and OB-24-082218 (460-163149-18) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B (DKQP). The samples were prepared on 08/28/2018 and 08/30/2018 and analyzed on 08/29/2018 and 08/30/2018.

No difficulties were encountered during the cyanide analysis.

All quality control parameters were within the acceptance limits.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-25-082118 — Lab Sample ID: 460-163149-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	10.3		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	86.5	D	6.00	3.90	mg/L	50		9056A	Total/NA
Arsenic	1.1	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	38.0		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	1.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Chromium	3.0	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	15.2		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	67.5		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	4.6		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	1.8		1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	1.4	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	3.9	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	17.5		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	1960		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	68000		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	9200		200	65.7	ug/L	2		6020B	Total/NA
Potassium	8010		200	64.9	ug/L	2		6020B	Total/NA
Calcium	39100		200	67.6	ug/L	2		6020B	Total/NA
Iron	2760		120	45.7	ug/L	2		6020B	Total/NA
Barium	28.6		4.0	1.1	ug/L	2		6020B	Dissolved
Copper	8.3		4.0	1.9	ug/L	2		6020B	Dissolved
Manganese	2.9	J	8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	1.7	J	4.0	1.3	ug/L	2		6020B	Dissolved
Zinc	14.0	J	16.0	5.4	ug/L	2		6020B	Dissolved
Sodium	59200		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	7350		200	65.7	ug/L	2		6020B	Dissolved
Potassium	7670		200	64.9	ug/L	2		6020B	Dissolved
Calcium	37900		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	138		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	138		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-7-082118 — Lab Sample ID: 460-163149-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-chloroethyl)ether	0.055		0.030	0.026	ug/L	1		8270D SIM	Total/NA
Hexachlorobenzene	0.016	J	0.020	0.013	ug/L	1		8270D SIM	Total/NA
Sulfate	9.75		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	21.3	D	1.20	0.78	mg/L	10		9056A	Total/NA
Barium	17.2		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	2.8	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	3.6	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	2600		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	2.1	J	4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	0.98	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Sodium	10700		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	29200		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2900		200	64.9	ug/L	2		6020B	Total/NA
Calcium	70600		200	67.6	ug/L	2		6020B	Total/NA
Iron	1810		120	45.7	ug/L	2		6020B	Total/NA
Barium	14.9		4.0	1.1	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-7-082118 (Continued) — Lab Sample ID: 460-163149-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	2.1	J	4.0	1.3	ug/L	2		6020B	Dissolved
Manganese	2160		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	1.5	J	4.0	1.3	ug/L	2		6020B	Dissolved
Sodium	8850		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	24000		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2620		200	64.9	ug/L	2		6020B	Dissolved
Calcium	64800		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	284		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	284		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-6-082118 — Lab Sample ID: 460-163149-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	10.1		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	5.81	D	1.20	0.78	mg/L	10		9056A	Total/NA
Barium	13.7		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	4.3		4.0	1.3	ug/L	2		6020B	Total/NA
Copper	11.3		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	388		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	1.1	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	38.0	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	10600		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	4370		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1740		200	64.9	ug/L	2		6020B	Total/NA
Calcium	16700		200	67.6	ug/L	2		6020B	Total/NA
Iron	6310		120	45.7	ug/L	2		6020B	Total/NA
Barium	12.5		4.0	1.1	ug/L	2		6020B	Dissolved
Cobalt	3.3	J	4.0	1.3	ug/L	2		6020B	Dissolved
Copper	2.4	J	4.0	1.9	ug/L	2		6020B	Dissolved
Manganese	326		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	9410		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3630		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1670		200	64.9	ug/L	2		6020B	Dissolved
Calcium	16000		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	61.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	61.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-4-082118 — Lab Sample ID: 460-163149-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	8.48		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	170	D	12.0	7.80	mg/L	100		9056A	Total/NA
Barium	56.7		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	1420		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	1.0	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	15.2	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	101000		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	16000		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2540		200	64.9	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-4-082118 (Continued) — Lab Sample ID: 460-163149-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	48100		200	67.6	ug/L	2		6020B	Total/NA
Iron	8160		120	45.7	ug/L	2		6020B	Total/NA
Barium	50.5		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	1250		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	88200		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	13300		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2480		200	64.9	ug/L	2		6020B	Dissolved
Calcium	46100		200	67.6	ug/L	2		6020B	Dissolved
Iron	1040		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	140		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	140		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-16-082118 — Lab Sample ID: 460-163149-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.1		5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	9.38		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	72.6	D	2.40	1.56	mg/L	20		9056A	Total/NA
Arsenic	8.9		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	104		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	1.8	J	4.0	1.3	ug/L	2		6020B	Total/NA
Manganese	3390		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	1.0	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	15.1	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	41500		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	19100		200	65.7	ug/L	2		6020B	Total/NA
Potassium	10400		200	64.9	ug/L	2		6020B	Total/NA
Calcium	133000		200	67.6	ug/L	2		6020B	Total/NA
Iron	15900		120	45.7	ug/L	2		6020B	Total/NA
Arsenic	2.1		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	75.1		4.0	1.1	ug/L	2		6020B	Dissolved
Cobalt	1.4	J	4.0	1.3	ug/L	2		6020B	Dissolved
Manganese	2980		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	35400		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	15000		200	65.7	ug/L	2		6020B	Dissolved
Potassium	9400		200	64.9	ug/L	2		6020B	Dissolved
Calcium	121000		200	67.6	ug/L	2		6020B	Dissolved
Iron	1980		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	388		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	388		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-18-082118 — Lab Sample ID: 460-163149-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.082		0.050	0.016	ug/L	1		8270D SIM	Total/NA
Benzo[a]pyrene	0.026	J	0.050	0.022	ug/L	1		8270D SIM	Total/NA
Benzo[b]fluoranthene	0.17		0.050	0.024	ug/L	1		8270D SIM	Total/NA
Dibenz(a,h)anthracene	0.25	*	0.050	0.011	ug/L	1		8270D SIM	Total/NA
Hexachlorobenzene	0.030		0.020	0.013	ug/L	1		8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.18		0.050	0.036	ug/L	1		8270D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-18-082118 (Continued) — Lab Sample ID: 460-163149-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.58	F1	0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	9.85		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	7.7		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	1.3	J	4.0	1.3	ug/L	2		6020B	Total/NA
Manganese	4.9	J	8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.86	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	117		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	6020		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	8870		200	65.7	ug/L	2		6020B	Total/NA
Potassium	432		200	64.9	ug/L	2		6020B	Total/NA
Calcium	37700		200	67.6	ug/L	2		6020B	Total/NA
Iron	169		120	45.7	ug/L	2		6020B	Total/NA
Barium	7.3		4.0	1.1	ug/L	2		6020B	Dissolved
Zinc	5.6	J	16.0	5.4	ug/L	2		6020B	Dissolved
Sodium	16400		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	6840		200	65.7	ug/L	2		6020B	Dissolved
Potassium	388		200	64.9	ug/L	2		6020B	Dissolved
Calcium	34200		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	153		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	153		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-17-082118 — Lab Sample ID: 460-163149-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.79	J	1.0	0.26	ug/L	1		8260C	Total/NA
1,4-Dioxane	11		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride - DL	12.9	D	0.60	0.39	mg/L	5		9056A	Total/NA
Sulfate - DL	36.4	D	3.00	1.66	mg/L	5		9056A	Total/NA
Barium	10.3		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	308		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	1.0	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Sodium	15500		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	30700		200	65.7	ug/L	2		6020B	Total/NA
Potassium	821		200	64.9	ug/L	2		6020B	Total/NA
Calcium	92400		200	67.6	ug/L	2		6020B	Total/NA
Iron	1750		120	45.7	ug/L	2		6020B	Total/NA
Barium	11.3		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	300		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	13300		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	25500		200	65.7	ug/L	2		6020B	Dissolved
Potassium	854		200	64.9	ug/L	2		6020B	Dissolved
Calcium	86600		200	67.6	ug/L	2		6020B	Dissolved
Iron	154		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	325		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	325		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: Dup-01-082118 — Lab Sample ID: 460-163149-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.79		0.12	0.078	mg/L	1		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Dup-01-082118 (Continued)

Lab Sample ID: 460-163149-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	9.84		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	7.1		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	1.5	J	4.0	1.3	ug/L	2		6020B	Total/NA
Manganese	3.0	J	8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.99	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	74.8		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	6010		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	8820		200	65.7	ug/L	2		6020B	Total/NA
Potassium	423		200	64.9	ug/L	2		6020B	Total/NA
Calcium	36900		200	67.6	ug/L	2		6020B	Total/NA
Iron	108	J	120	45.7	ug/L	2		6020B	Total/NA
Barium	5.6		4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	4360		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	6240		200	65.7	ug/L	2		6020B	Dissolved
Potassium	344		200	64.9	ug/L	2		6020B	Dissolved
Calcium	31600		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	125		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	125		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-28-082118

Lab Sample ID: 460-163149-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate - DL	26.2	D	3.00	1.66	mg/L	5		9056A	Total/NA
Chloride - DL2	108	D	6.00	3.90	mg/L	50		9056A	Total/NA
Arsenic	0.99	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	71.3		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	2.0	J	4.0	1.3	ug/L	2		6020B	Total/NA
Chromium	2.1	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	6.7		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	3270		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	3.1	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	1.0	J	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.68	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	3.0	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	7.6	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	1190		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	22400		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	28200		200	65.7	ug/L	2		6020B	Total/NA
Potassium	3870		200	64.9	ug/L	2		6020B	Total/NA
Calcium	124000		200	67.6	ug/L	2		6020B	Total/NA
Iron	3260		120	45.7	ug/L	2		6020B	Total/NA
Barium	65.7		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	2930		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	20000		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	25200		200	65.7	ug/L	2		6020B	Dissolved
Potassium	3660		200	64.9	ug/L	2		6020B	Dissolved
Calcium	126000		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	326		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	326		5.0	5.0	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-22-082118 — Lab Sample ID: 460-163149-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	16.9		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	38.5	D	1.20	0.78	mg/L	10		9056A	Total/NA
Barium	13.5		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	4.7	J	8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	1.4	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Selenium	0.92	J	10.0	0.69	ug/L	2		6020B	Total/NA
Aluminum	165		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	23700		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	6550		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1050		200	64.9	ug/L	2		6020B	Total/NA
Calcium	31500		200	67.6	ug/L	2		6020B	Total/NA
Iron	226		120	45.7	ug/L	2		6020B	Total/NA
Barium	10.6		4.0	1.1	ug/L	2		6020B	Dissolved
Selenium	0.87	J	10.0	0.69	ug/L	2		6020B	Dissolved
Sodium	18200		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	4800		200	65.7	ug/L	2		6020B	Dissolved
Potassium	863		200	64.9	ug/L	2		6020B	Dissolved
Calcium	27200		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	77.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	77.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-16-082118 — Lab Sample ID: 460-163149-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	12.9		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	51.4	D	2.40	1.56	mg/L	20		9056A	Total/NA
Barium	39.3		4.0	1.1	ug/L	2		6020B	Total/NA
Antimony	0.86	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Sodium	20300		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	22000		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2110		200	64.9	ug/L	2		6020B	Total/NA
Calcium	66700		200	67.6	ug/L	2		6020B	Total/NA
Iron	117	J	120	45.7	ug/L	2		6020B	Total/NA
Barium	30.2		4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	15000		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	16500		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1700		200	64.9	ug/L	2		6020B	Dissolved
Calcium	55200		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	207		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	207		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-14A-082118 — Lab Sample ID: 460-163149-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	0.70		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	20.0	D	1.20	0.78	mg/L	10		9056A	Total/NA
Barium	418		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	1880		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	3.0	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	3.1		1.2	0.37	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-14A-082118 (Continued) — Lab Sample ID: 460-163149-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.2	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	1.7	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	21.0		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	56.3		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	17600		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	10300		200	65.7	ug/L	2		6020B	Total/NA
Potassium	5120		200	64.9	ug/L	2		6020B	Total/NA
Calcium	105000		200	67.6	ug/L	2		6020B	Total/NA
Iron	48500		120	45.7	ug/L	2		6020B	Total/NA
Barium	285		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	1540		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	1.8	J	4.0	1.3	ug/L	2		6020B	Dissolved
Zinc	10.6	J	16.0	5.4	ug/L	2		6020B	Dissolved
Sodium	14600		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	8300		200	65.7	ug/L	2		6020B	Dissolved
Potassium	4560		200	64.9	ug/L	2		6020B	Dissolved
Calcium	95300		200	67.6	ug/L	2		6020B	Dissolved
Iron	9430		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	337		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	337		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-14B-082118 — Lab Sample ID: 460-163149-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.33		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Sulfate	13.2		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	49.1	D	2.40	1.56	mg/L	20		9056A	Total/NA
Arsenic	1.2	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	45.6		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	1980		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	0.86	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	42.6		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	22300		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	29000		200	65.7	ug/L	2		6020B	Total/NA
Potassium	3220		200	64.9	ug/L	2		6020B	Total/NA
Calcium	104000		200	67.6	ug/L	2		6020B	Total/NA
Iron	944		120	45.7	ug/L	2		6020B	Total/NA
Arsenic	0.80	J	2.0	0.77	ug/L	2		6020B	Dissolved
Barium	38.4		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	1620		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	17200		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	22300		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2780		200	64.9	ug/L	2		6020B	Dissolved
Calcium	91500		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	337		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	337		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: FB-01-082118 — Lab Sample ID: 460-163149-14

This Detection Summary does not include radiochemical test results.

Client Sample ID: FB-01-082118 (Continued) — Lab Sample ID: 460-163149-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	4.3		1.0	0.32	ug/L	1		8260C	Total/NA
Aluminum	18.3	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	2050		200	75.7	ug/L	2		6020B	Total/NA
Sodium	113	J	200	75.7	ug/L	2		6020B	Dissolved

Client Sample ID: TB-01-082218 — Lab Sample ID: 460-163149-15

No Detections.

Client Sample ID: OB-23-082118 — Lab Sample ID: 460-163149-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
N-Nitrosodiphenylamine	1.0	J	10	0.89	ug/L	1		8270D	Total/NA
Sulfate	2.56		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	63.2	D	2.40	1.56	mg/L	20		9056A	Total/NA
Barium	373		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	1620		8.0	2.7	ug/L	2		6020B	Total/NA
Lead	1.1	J	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	1.2	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	1.3	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	10.8	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	33.4	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	66400		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	10600		200	65.7	ug/L	2		6020B	Total/NA
Potassium	6840		200	64.9	ug/L	2		6020B	Total/NA
Calcium	91500		200	67.6	ug/L	2		6020B	Total/NA
Iron	44200		120	45.7	ug/L	2		6020B	Total/NA
Barium	265		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	1430		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	56800		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	8820		200	65.7	ug/L	2		6020B	Dissolved
Potassium	6440		200	64.9	ug/L	2		6020B	Dissolved
Calcium	87300		200	67.6	ug/L	2		6020B	Dissolved
Iron	10000		120	45.7	ug/L	2		6020B	Dissolved
Cyanide, Total	0.0063	J	0.010	0.0020	mg/L	1		9012B	Total/NA
Bicarbonate Alkalinity as CaCO3	348		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	348		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-3-082218 — Lab Sample ID: 460-163149-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.32	J	1.0	0.32	ug/L	1		8260C	Total/NA
Chloride	4.40		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	8.79		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	3.0	J	4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	9.3		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	1.0	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Sodium	4780		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	3230		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1020		200	64.9	ug/L	2		6020B	Total/NA
Calcium	9520		200	67.6	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-3-082218 (Continued) — Lab Sample ID: 460-163149-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	1930		120	45.7	ug/L	2		6020B	Total/NA
Barium	2.8	J	4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	15.2		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	3540		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2480		200	65.7	ug/L	2		6020B	Dissolved
Potassium	902		200	64.9	ug/L	2		6020B	Dissolved
Calcium	8650		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	28.8		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	28.8		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-24-082218 — Lab Sample ID: 460-163149-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.37	J	1.0	0.32	ug/L	1		8260C	Total/NA
Sulfate	27.4		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	73.8	D	3.00	1.95	mg/L	25		9056A	Total/NA
Barium	38.7		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	273		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.76	J B	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	19.7	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	18000		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	24400		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2350		200	64.9	ug/L	2		6020B	Total/NA
Calcium	93900		200	67.6	ug/L	2		6020B	Total/NA
Iron	46.7	J	120	45.7	ug/L	2		6020B	Total/NA
Barium	32.3		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	22.0		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	14400		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	20100		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2110		200	64.9	ug/L	2		6020B	Dissolved
Calcium	85100		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	220		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	220		5.0	5.0	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-25-082118
Date Collected: 08/21/18 10:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 12:06	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 12:06	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*70 - 130*		*08/24/18 12:06*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 07:02	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 07:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 07:02	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 07:02	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 07:02	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 07:02	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 07:02	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 07:02	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 07:02	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 07:02	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 07:02	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 07:02	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 07:02	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 07:02	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 07:02	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 07:02	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 07:02	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 07:02	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 07:02	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 07:02	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 07:02	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 07:02	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 07:02	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 07:02	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 07:02	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 07:02	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 07:02	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 07:02	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 07:02	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 07:02	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 07:02	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 07:02	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 07:02	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 07:02	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 07:02	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/26/18 07:02	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 07:02	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 07:02	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/26/18 07:02	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 07:02	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 07:02	1

Client Sample ID: OB-25-082118
Date Collected: 08/21/18 10:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 07:02	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 07:02	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 07:02	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 07:02	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 07:02	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 07:02	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 07:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 07:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/18 07:02*	*1*
4-Bromofluorobenzene	*92*		*70 - 130*		*08/26/18 07:02*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*08/26/18 07:02*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/26/18 07:02*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/24/18 09:07	08/24/18 15:50	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*10 - 150*	*08/24/18 09:07*	*08/24/18 15:50*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 07:09	08/26/18 20:04	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 07:09	08/26/18 20:04	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 07:09	08/26/18 20:04	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 07:09	08/26/18 20:04	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/25/18 07:09	08/26/18 20:04	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 07:09	08/26/18 20:04	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 07:09	08/26/18 20:04	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 07:09	08/26/18 20:04	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/25/18 07:09	08/26/18 20:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 07:09	08/26/18 02:57	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 07:09	08/26/18 02:57	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 07:09	08/26/18 02:57	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 02:57	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 02:57	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 02:57	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 07:09	08/26/18 02:57	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 02:57	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 07:09	08/26/18 02:57	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 07:09	08/26/18 02:57	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 07:09	08/26/18 02:57	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 07:09	08/26/18 02:57	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 07:09	08/26/18 02:57	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-25-082118
Date Collected: 08/21/18 10:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 07:09	08/26/18 02:57	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 07:09	08/26/18 02:57	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 07:09	08/26/18 02:57	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 07:09	08/26/18 02:57	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 02:57	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 07:09	08/26/18 02:57	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 07:09	08/26/18 02:57	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 02:57	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 07:09	08/26/18 02:57	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 02:57	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 07:09	08/26/18 02:57	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 07:09	08/26/18 02:57	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 07:09	08/26/18 02:57	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 07:09	08/26/18 02:57	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 07:09	08/26/18 02:57	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 02:57	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 02:57	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 07:09	08/26/18 02:57	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 07:09	08/26/18 02:57	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 07:09	08/26/18 02:57	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 07:09	08/26/18 02:57	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 07:09	08/26/18 02:57	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 07:09	08/26/18 02:57	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 02:57	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 02:57	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 02:57	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 02:57	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 02:57	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 02:57	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 07:09	08/26/18 02:57	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 07:09	08/26/18 02:57	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 07:09	08/26/18 02:57	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 07:09	08/26/18 02:57	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 07:09	08/26/18 02:57	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 07:09	08/26/18 02:57	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 02:57	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 02:57	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 07:09	08/26/18 02:57	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 07:09	08/26/18 02:57	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 02:57	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/26/18 02:57	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 02:57	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 02:57	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 02:57	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 02:57	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 02:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 07:09*	*08/26/18 02:57*	*1*

Client Sample ID: OB-25-082118
Date Collected: 08/21/18 10:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	74		30 - 130	08/25/18 07:09	08/26/18 02:57	1
Phenol-d5 (Surr)	13	X	15 - 110	08/25/18 07:09	08/26/18 02:57	1
Terphenyl-d14 (Surr)	97		30 - 130	08/25/18 07:09	08/26/18 02:57	1
2,4,6-Tribromophenol (Surr)	78		15 - 110	08/25/18 07:09	08/26/18 02:57	1
2-Fluorophenol (Surr)	33		15 - 110	08/25/18 07:09	08/26/18 02:57	1
2-Fluorobiphenyl	75		30 - 130	08/25/18 07:09	08/26/18 02:57	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 23:31	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 23:31	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 23:31	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 23:31	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 23:31	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 23:31	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 23:31	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 23:31	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 23:31	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 23:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	63		30 - 150	08/24/18 18:58	08/25/18 23:31	1
Tetrachloro-m-xylene	64		30 - 150	08/24/18 18:58	08/25/18 23:31	1
DCB Decachlorobiphenyl	73		30 - 150	08/24/18 18:58	08/25/18 23:31	1
DCB Decachlorobiphenyl	77		30 - 150	08/24/18 18:58	08/25/18 23:31	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**10.3**		0.60	0.33	mg/L			08/26/18 10:41	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**86.5**	**D**	6.00	3.90	mg/L			08/27/18 05:13	50

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 08:49	08/28/18 15:55	2
Arsenic	**1.1**	**J**	2.0	0.77	ug/L		08/28/18 08:49	08/28/18 15:55	2
Barium	**38.0**		4.0	1.1	ug/L		08/28/18 08:49	08/28/18 15:55	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 08:49	08/28/18 15:55	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 08:49	08/28/18 15:55	2
Cobalt	**1.4**	**J**	4.0	1.3	ug/L		08/28/18 08:49	08/28/18 15:55	2
Chromium	**3.0**	**J**	4.0	1.3	ug/L		08/28/18 08:49	08/28/18 15:55	2
Copper	**15.2**		4.0	1.9	ug/L		08/28/18 08:49	08/28/18 15:55	2
Manganese	**67.5**		8.0	2.7	ug/L		08/28/18 08:49	08/28/18 15:55	2
Nickel	**4.6**		4.0	1.3	ug/L		08/28/18 08:49	08/28/18 15:55	2
Lead	**1.8**		1.2	0.37	ug/L		08/28/18 08:49	08/28/18 15:55	2
Antimony	**1.4**	**J B**	2.0	0.62	ug/L		08/28/18 08:49	08/28/18 15:55	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 08:49	08/28/18 15:55	2
Vanadium	**3.9**	**J**	4.0	1.2	ug/L		08/28/18 08:49	08/28/18 15:55	2
Zinc	**17.5**		16.0	5.4	ug/L		08/28/18 08:49	08/28/18 15:55	2

Client Sample ID: OB-25-082118

Date Collected: 08/21/18 10:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-1

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1960**		40.0	15.0	ug/L		08/28/18 08:49	08/28/18 15:55	2
Sodium	**68000**		200	75.7	ug/L		08/28/18 08:49	08/28/18 15:55	2
Magnesium	**9200**		200	65.7	ug/L		08/28/18 08:49	08/28/18 15:55	2
Potassium	**8010**		200	64.9	ug/L		08/28/18 08:49	08/28/18 15:55	2
Calcium	**39100**		200	67.6	ug/L		08/28/18 08:49	08/28/18 15:55	2
Iron	**2760**		120	45.7	ug/L		08/28/18 08:49	08/28/18 15:55	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 08:49	08/28/18 15:55	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/30/18 01:37	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/30/18 01:37	2
Barium	**28.6**		4.0	1.1	ug/L		08/25/18 00:02	08/30/18 01:37	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/30/18 01:37	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/30/18 01:37	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 01:37	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 01:37	2
Copper	**8.3**		4.0	1.9	ug/L		08/25/18 00:02	08/30/18 01:37	2
Manganese	**2.9**	**J**	8.0	2.7	ug/L		08/25/18 00:02	08/30/18 01:37	2
Nickel	**1.7**	**J**	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 01:37	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/30/18 01:37	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/30/18 01:37	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/30/18 01:37	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/30/18 01:37	2
Zinc	**14.0**	**J**	16.0	5.4	ug/L		08/25/18 00:02	08/30/18 01:37	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/30/18 01:37	2
Sodium	**59200**		200	75.7	ug/L		08/25/18 00:02	08/30/18 01:37	2
Magnesium	**7350**		200	65.7	ug/L		08/25/18 00:02	08/30/18 01:37	2
Potassium	**7670**		200	64.9	ug/L		08/25/18 00:02	08/30/18 01:37	2
Calcium	**37900**		200	67.6	ug/L		08/25/18 00:02	08/30/18 01:37	2
Iron	45.7	U	120	45.7	ug/L		08/25/18 00:02	08/30/18 01:37	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/30/18 01:37	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:15	08/24/18 14:53	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 12:45	1
Bicarbonate Alkalinity as CaCO3	**138**		5.0	5.0	mg/L			08/24/18 10:46	1
Alkalinity	**138**		5.0	5.0	mg/L			08/24/18 10:46	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-7-082118
Date Collected: 08/21/18 12:50
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 12:29	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 12:29	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*70 - 130*		*08/24/18 12:29*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 06:40	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 06:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 06:40	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 06:40	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 06:40	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 06:40	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 06:40	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 06:40	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 06:40	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 06:40	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 06:40	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 06:40	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 06:40	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 06:40	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 06:40	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 06:40	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 06:40	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 06:40	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 06:40	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 06:40	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 06:40	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 06:40	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 06:40	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 06:40	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 06:40	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 06:40	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 06:40	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 06:40	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 06:40	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 06:40	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 06:40	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 06:40	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 06:40	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 06:40	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 06:40	1
Methyl acetate	0.31	U F1 *	5.0	0.31	ug/L			08/26/18 06:40	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 06:40	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 06:40	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/26/18 06:40	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 06:40	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 06:40	1

Client Sample ID: OB-7-082118
Date Collected: 08/21/18 12:50
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 06:40	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 06:40	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 06:40	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 06:40	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 06:40	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 06:40	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 06:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 06:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/26/18 06:40*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*08/26/18 06:40*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*08/26/18 06:40*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/26/18 06:40*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/24/18 09:07	08/24/18 14:21	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/24/18 09:07*	*08/24/18 14:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 07:09	08/27/18 20:16	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 07:09	08/27/18 20:16	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 07:09	08/27/18 20:16	1
Bis(2-chloroethyl)ether	**0.055**		0.030	0.026	ug/L		08/25/18 07:09	08/27/18 20:16	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/25/18 07:09	08/27/18 20:16	1
Hexachlorobenzene	**0.016**	**J**	0.020	0.013	ug/L		08/25/18 07:09	08/27/18 20:16	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 07:09	08/27/18 20:16	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 07:09	08/27/18 20:16	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/25/18 07:09	08/27/18 20:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 07:09	08/25/18 22:25	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 07:09	08/25/18 22:25	1
2-Methylphenol	0.26	U * F1	10	0.26	ug/L		08/25/18 07:09	08/25/18 22:25	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/25/18 22:25	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/25/18 22:25	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/25/18 22:25	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 07:09	08/25/18 22:25	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/25/18 22:25	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 07:09	08/25/18 22:25	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 07:09	08/25/18 22:25	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 07:09	08/25/18 22:25	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 07:09	08/25/18 22:25	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 07:09	08/25/18 22:25	1

Client Sample ID: OB-7-082118
Date Collected: 08/21/18 12:50
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 07:09	08/25/18 22:25	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 07:09	08/25/18 22:25	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 07:09	08/25/18 22:25	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 07:09	08/25/18 22:25	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 22:25	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 07:09	08/25/18 22:25	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 07:09	08/25/18 22:25	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 22:25	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 07:09	08/25/18 22:25	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/25/18 22:25	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 07:09	08/25/18 22:25	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 07:09	08/25/18 22:25	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 07:09	08/25/18 22:25	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 07:09	08/25/18 22:25	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 07:09	08/25/18 22:25	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 22:25	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 22:25	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 07:09	08/25/18 22:25	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 07:09	08/25/18 22:25	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 07:09	08/25/18 22:25	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 07:09	08/25/18 22:25	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 07:09	08/25/18 22:25	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 07:09	08/25/18 22:25	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/25/18 22:25	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/25/18 22:25	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/25/18 22:25	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/25/18 22:25	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/25/18 22:25	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/25/18 22:25	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 07:09	08/25/18 22:25	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 07:09	08/25/18 22:25	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 07:09	08/25/18 22:25	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 07:09	08/25/18 22:25	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 07:09	08/25/18 22:25	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 07:09	08/25/18 22:25	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/25/18 22:25	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/25/18 22:25	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 07:09	08/25/18 22:25	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 07:09	08/25/18 22:25	1
Caprolactam	0.68	U F1	10	0.68	ug/L		08/25/18 07:09	08/25/18 22:25	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/25/18 22:25	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/25/18 22:25	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/25/18 22:25	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/25/18 22:25	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/25/18 22:25	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/25/18 22:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 07:09*	*08/25/18 22:25*	*1*

Client Sample ID: OB-7-082118

Date Collected: 08/21/18 12:50
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-2

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	89		30 - 130	08/25/18 07:09	08/25/18 22:25	1
Phenol-d5 (Surr)	15		15 - 110	08/25/18 07:09	08/25/18 22:25	1
Terphenyl-d14 (Surr)	98		30 - 130	08/25/18 07:09	08/25/18 22:25	1
2,4,6-Tribromophenol (Surr)	88		15 - 110	08/25/18 07:09	08/25/18 22:25	1
2-Fluorophenol (Surr)	41		15 - 110	08/25/18 07:09	08/25/18 22:25	1
2-Fluorobiphenyl	94		30 - 130	08/25/18 07:09	08/25/18 22:25	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/25/18 23:07	1
PCB-1016	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/25/18 23:07	1
PCB-1221	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/25/18 23:07	1
PCB-1232	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/25/18 23:07	1
PCB-1242	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/25/18 23:07	1
PCB-1248	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/25/18 23:07	1
PCB-1254	0.11	U	0.41	0.11	ug/L		08/24/18 18:58	08/25/18 23:07	1
PCB-1260	0.11	U	0.41	0.11	ug/L		08/24/18 18:58	08/25/18 23:07	1
PCB-1262	0.11	U	0.41	0.11	ug/L		08/24/18 18:58	08/25/18 23:07	1
PCB-1268	0.11	U	0.41	0.11	ug/L		08/24/18 18:58	08/25/18 23:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	63		30 - 150	08/24/18 18:58	08/25/18 23:07	1
Tetrachloro-m-xylene	62		30 - 150	08/24/18 18:58	08/25/18 23:07	1
DCB Decachlorobiphenyl	71		30 - 150	08/24/18 18:58	08/25/18 23:07	1
DCB Decachlorobiphenyl	74		30 - 150	08/24/18 18:58	08/25/18 23:07	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**9.75**		0.60	0.33	mg/L			08/26/18 10:52	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.3**	**D**	1.20	0.78	mg/L			08/27/18 05:27	10

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 08:49	08/28/18 15:36	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 08:49	08/28/18 15:36	2
Barium	**17.2**		4.0	1.1	ug/L		08/28/18 08:49	08/28/18 15:36	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 08:49	08/28/18 15:36	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 08:49	08/28/18 15:36	2
Cobalt	**2.8**	**J**	4.0	1.3	ug/L		08/28/18 08:49	08/28/18 15:36	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 08:49	08/28/18 15:36	2
Copper	**3.6**	**J**	4.0	1.9	ug/L		08/28/18 08:49	08/28/18 15:36	2
Manganese	**2600**		8.0	2.7	ug/L		08/28/18 08:49	08/28/18 15:36	2
Nickel	**2.1**	**J**	4.0	1.3	ug/L		08/28/18 08:49	08/28/18 15:36	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 08:49	08/28/18 15:36	2
Antimony	**0.98**	**J B**	2.0	0.62	ug/L		08/28/18 08:49	08/28/18 15:36	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 08:49	08/28/18 15:36	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 08:49	08/28/18 15:36	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 08:49	08/28/18 15:36	2

Client Sample ID: OB-7-082118
Date Collected: 08/21/18 12:50
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-2
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15.0	U	40.0	15.0	ug/L		08/28/18 08:49	08/28/18 15:36	2
Sodium	**10700**		200	75.7	ug/L		08/28/18 08:49	08/28/18 15:36	2
Magnesium	**29200**		200	65.7	ug/L		08/28/18 08:49	08/28/18 15:36	2
Potassium	**2900**		200	64.9	ug/L		08/28/18 08:49	08/28/18 15:36	2
Calcium	**70600**		200	67.6	ug/L		08/28/18 08:49	08/28/18 15:36	2
Iron	**1810**		120	45.7	ug/L		08/28/18 08:49	08/28/18 15:36	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 08:49	08/28/18 15:36	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/25/18 03:47	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/25/18 03:47	2
Barium	**14.9**		4.0	1.1	ug/L		08/25/18 00:02	08/27/18 21:32	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/25/18 03:47	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/25/18 03:47	2
Cobalt	**2.1**	**J**	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 03:47	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 03:47	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/25/18 03:47	2
Manganese	**2160**		8.0	2.7	ug/L		08/25/18 00:02	08/25/18 03:47	2
Nickel	**1.5**	**J**	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 03:47	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/25/18 03:47	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/25/18 03:47	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/25/18 03:47	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/25/18 03:47	2
Zinc	5.4	U	16.0	5.4	ug/L		08/25/18 00:02	08/25/18 03:47	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/25/18 03:47	2
Sodium	**8850**		200	75.7	ug/L		08/25/18 00:02	08/25/18 03:47	2
Magnesium	**24000**		200	65.7	ug/L		08/25/18 00:02	08/25/18 03:47	2
Potassium	**2620**		200	64.9	ug/L		08/25/18 00:02	08/25/18 03:47	2
Calcium	**64800**		200	67.6	ug/L		08/25/18 00:02	08/25/18 03:47	2
Iron	45.7	U	120	45.7	ug/L		08/25/18 00:02	08/25/18 03:47	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/25/18 03:47	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:15	08/24/18 14:38	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 15:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:17	1
Bicarbonate Alkalinity as CaCO3	**284**		5.0	5.0	mg/L			08/24/18 09:48	1
Alkalinity	**284**		5.0	5.0	mg/L			08/24/18 09:48	1

Client Sample ID: OB-6-082118
Date Collected: 08/21/18 15:15
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 12:53	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 12:53	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*70 - 130*		*08/24/18 12:53*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 07:25	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 07:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 07:25	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 07:25	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 07:25	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 07:25	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 07:25	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 07:25	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 07:25	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 07:25	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 07:25	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 07:25	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 07:25	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 07:25	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 07:25	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 07:25	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 07:25	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 07:25	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 07:25	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 07:25	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 07:25	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 07:25	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 07:25	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 07:25	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 07:25	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 07:25	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 07:25	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 07:25	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 07:25	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 07:25	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 07:25	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 07:25	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 07:25	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 07:25	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 07:25	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/26/18 07:25	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 07:25	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 07:25	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/26/18 07:25	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 07:25	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 07:25	1

Client Sample ID: OB-6-082118
Date Collected: 08/21/18 15:15
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 07:25	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 07:25	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 07:25	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 07:25	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 07:25	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 07:25	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 07:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 07:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*08/26/18 07:25*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*08/26/18 07:25*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*08/26/18 07:25*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/26/18 07:25*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.017	U	0.22	0.017	ug/L		08/24/18 09:07	08/24/18 16:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*41*		*10 - 150*	*08/24/18 09:07*	*08/24/18 16:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 07:09	08/27/18 20:37	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 07:09	08/27/18 20:37	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 07:09	08/27/18 20:37	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 07:09	08/27/18 20:37	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/25/18 07:09	08/27/18 20:37	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 07:09	08/27/18 20:37	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 07:09	08/27/18 20:37	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 07:09	08/27/18 20:37	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/25/18 07:09	08/27/18 20:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 07:09	08/25/18 23:28	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 07:09	08/25/18 23:28	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 07:09	08/25/18 23:28	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/25/18 23:28	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/25/18 23:28	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/25/18 23:28	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 07:09	08/25/18 23:28	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/25/18 23:28	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 07:09	08/25/18 23:28	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 07:09	08/25/18 23:28	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 07:09	08/25/18 23:28	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 07:09	08/25/18 23:28	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 07:09	08/25/18 23:28	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-6-082118
Date Collected: 08/21/18 15:15
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 07:09	08/25/18 23:28	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 07:09	08/25/18 23:28	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 07:09	08/25/18 23:28	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 07:09	08/25/18 23:28	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 23:28	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 07:09	08/25/18 23:28	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 07:09	08/25/18 23:28	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 23:28	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 07:09	08/25/18 23:28	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/25/18 23:28	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 07:09	08/25/18 23:28	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 07:09	08/25/18 23:28	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 07:09	08/25/18 23:28	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 07:09	08/25/18 23:28	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 07:09	08/25/18 23:28	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 23:28	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 23:28	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 07:09	08/25/18 23:28	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 07:09	08/25/18 23:28	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 07:09	08/25/18 23:28	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 07:09	08/25/18 23:28	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 07:09	08/25/18 23:28	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 07:09	08/25/18 23:28	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/25/18 23:28	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/25/18 23:28	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/25/18 23:28	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/25/18 23:28	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/25/18 23:28	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/25/18 23:28	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 07:09	08/25/18 23:28	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 07:09	08/25/18 23:28	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 07:09	08/25/18 23:28	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 07:09	08/25/18 23:28	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 07:09	08/25/18 23:28	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 07:09	08/25/18 23:28	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/25/18 23:28	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/25/18 23:28	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 07:09	08/25/18 23:28	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 07:09	08/25/18 23:28	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/25/18 23:28	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/25/18 23:28	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/25/18 23:28	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/25/18 23:28	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/25/18 23:28	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/25/18 23:28	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/25/18 23:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 07:09*	*08/25/18 23:28*	*1*

Client Sample ID: OB-6-082118
Date Collected: 08/21/18 15:15
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	93		30 - 130	08/25/18 07:09	08/25/18 23:28	1
Phenol-d5 (Surr)	17		15 - 110	08/25/18 07:09	08/25/18 23:28	1
Terphenyl-d14 (Surr)	102		30 - 130	08/25/18 07:09	08/25/18 23:28	1
2,4,6-Tribromophenol (Surr)	87		15 - 110	08/25/18 07:09	08/25/18 23:28	1
2-Fluorophenol (Surr)	43		15 - 110	08/25/18 07:09	08/25/18 23:28	1
2-Fluorobiphenyl	90		30 - 130	08/25/18 07:09	08/25/18 23:28	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 23:54	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 23:54	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 23:54	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 23:54	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 23:54	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 23:54	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 23:54	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 23:54	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 23:54	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 23:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	62		30 - 150	08/24/18 18:58	08/25/18 23:54	1
Tetrachloro-m-xylene	61		30 - 150	08/24/18 18:58	08/25/18 23:54	1
DCB Decachlorobiphenyl	72		30 - 150	08/24/18 18:58	08/25/18 23:54	1
DCB Decachlorobiphenyl	73		30 - 150	08/24/18 18:58	08/25/18 23:54	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**10.1**		0.60	0.33	mg/L			08/26/18 11:37	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.81**	**D**	1.20	0.78	mg/L			08/27/18 06:20	10

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 08:49	08/28/18 15:58	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 08:49	08/28/18 15:58	2
Barium	**13.7**		4.0	1.1	ug/L		08/28/18 08:49	08/28/18 15:58	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 08:49	08/28/18 15:58	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 08:49	08/28/18 15:58	2
Cobalt	**4.3**		4.0	1.3	ug/L		08/28/18 08:49	08/28/18 15:58	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 08:49	08/28/18 15:58	2
Copper	**11.3**		4.0	1.9	ug/L		08/28/18 08:49	08/28/18 15:58	2
Manganese	**388**		8.0	2.7	ug/L		08/28/18 08:49	08/28/18 15:58	2
Nickel	**1.4**	**J**	4.0	1.3	ug/L		08/28/18 08:49	08/28/18 15:58	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 08:49	08/28/18 15:58	2
Antimony	**1.1**	**J B**	2.0	0.62	ug/L		08/28/18 08:49	08/28/18 15:58	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 08:49	08/28/18 15:58	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 08:49	08/28/18 15:58	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 08:49	08/28/18 15:58	2

Client Sample ID: OB-6-082118
Date Collected: 08/21/18 15:15
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-3
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**38.0**	**J**	40.0	15.0	ug/L		08/28/18 08:49	08/28/18 15:58	2
Sodium	**10600**		200	75.7	ug/L		08/28/18 08:49	08/28/18 15:58	2
Magnesium	**4370**		200	65.7	ug/L		08/28/18 08:49	08/28/18 15:58	2
Potassium	**1740**		200	64.9	ug/L		08/28/18 08:49	08/28/18 15:58	2
Calcium	**16700**		200	67.6	ug/L		08/28/18 08:49	08/28/18 15:58	2
Iron	**6310**		120	45.7	ug/L		08/28/18 08:49	08/28/18 15:58	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 08:49	08/28/18 15:58	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 16:59	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 16:59	2
Barium	**12.5**		4.0	1.1	ug/L		08/27/18 09:32	08/27/18 16:59	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 16:59	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 16:59	2
Cobalt	**3.3**	**J**	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:59	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:59	2
Copper	**2.4**	**J**	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 16:59	2
Manganese	**326**		8.0	2.7	ug/L		08/27/18 09:32	08/27/18 16:59	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:59	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 16:59	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 16:59	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 16:59	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 16:59	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 16:59	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 16:59	2
Sodium	**9410**		200	75.7	ug/L		08/27/18 09:32	08/27/18 16:59	2
Magnesium	**3630**		200	65.7	ug/L		08/27/18 09:32	08/27/18 16:59	2
Potassium	**1670**		200	64.9	ug/L		08/27/18 09:32	08/27/18 16:59	2
Calcium	**16000**		200	67.6	ug/L		08/27/18 09:32	08/27/18 16:59	2
Iron	45.7	U	120	45.7	ug/L		08/27/18 09:32	08/27/18 16:59	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 16:59	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:15	08/24/18 14:55	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 15:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:20	1
Bicarbonate Alkalinity as CaCO3	**61.3**		5.0	5.0	mg/L			08/24/18 10:53	1
Alkalinity	**61.3**		5.0	5.0	mg/L			08/24/18 10:53	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-4-082118
Date Collected: 08/21/18 16:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 13:16	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 13:16	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*70 - 130*		*08/24/18 13:16*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 07:47	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 07:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 07:47	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 07:47	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 07:47	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 07:47	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 07:47	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 07:47	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 07:47	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 07:47	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 07:47	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 07:47	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 07:47	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 07:47	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 07:47	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 07:47	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 07:47	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 07:47	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 07:47	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 07:47	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 07:47	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 07:47	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 07:47	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 07:47	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 07:47	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 07:47	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 07:47	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 07:47	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 07:47	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 07:47	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 07:47	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 07:47	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 07:47	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 07:47	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 07:47	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/26/18 07:47	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 07:47	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 07:47	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/26/18 07:47	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 07:47	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 07:47	1

Client Sample ID: OB-4-082118
Date Collected: 08/21/18 16:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 07:47	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 07:47	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 07:47	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 07:47	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 07:47	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 07:47	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 07:47	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 07:47*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/26/18 07:47*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*08/26/18 07:47*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/26/18 07:47*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*08/26/18 07:47*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/24/18 09:07	08/24/18 16:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*10 - 150*	*08/24/18 09:07*	*08/24/18 16:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 07:09	08/26/18 16:55	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 07:09	08/26/18 16:55	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 07:09	08/26/18 16:55	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 07:09	08/26/18 16:55	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/25/18 07:09	08/26/18 16:55	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 07:09	08/26/18 16:55	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 07:09	08/26/18 16:55	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 07:09	08/26/18 16:55	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/25/18 07:09	08/26/18 16:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 07:09	08/25/18 23:49	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 07:09	08/25/18 23:49	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 07:09	08/25/18 23:49	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/25/18 23:49	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/25/18 23:49	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/25/18 23:49	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 07:09	08/25/18 23:49	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/25/18 23:49	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 07:09	08/25/18 23:49	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 07:09	08/25/18 23:49	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 07:09	08/25/18 23:49	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 07:09	08/25/18 23:49	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 07:09	08/25/18 23:49	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-4-082118
Date Collected: 08/21/18 16:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 07:09	08/25/18 23:49	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 07:09	08/25/18 23:49	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 07:09	08/25/18 23:49	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 07:09	08/25/18 23:49	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 23:49	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 07:09	08/25/18 23:49	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 07:09	08/25/18 23:49	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 23:49	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 07:09	08/25/18 23:49	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/25/18 23:49	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 07:09	08/25/18 23:49	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 07:09	08/25/18 23:49	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 07:09	08/25/18 23:49	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 07:09	08/25/18 23:49	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 07:09	08/25/18 23:49	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 23:49	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 23:49	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 07:09	08/25/18 23:49	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 07:09	08/25/18 23:49	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 07:09	08/25/18 23:49	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 07:09	08/25/18 23:49	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 07:09	08/25/18 23:49	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 07:09	08/25/18 23:49	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/25/18 23:49	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/25/18 23:49	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/25/18 23:49	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/25/18 23:49	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/25/18 23:49	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/25/18 23:49	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 07:09	08/25/18 23:49	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 07:09	08/25/18 23:49	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 07:09	08/25/18 23:49	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 07:09	08/25/18 23:49	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 07:09	08/25/18 23:49	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 07:09	08/25/18 23:49	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/25/18 23:49	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/25/18 23:49	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 07:09	08/25/18 23:49	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 07:09	08/25/18 23:49	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/25/18 23:49	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/25/18 23:49	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/25/18 23:49	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/25/18 23:49	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/25/18 23:49	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/25/18 23:49	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/25/18 23:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 07:09*	*08/25/18 23:49*	*1*

Client Sample ID: OB-4-082118

Date Collected: 08/21/18 16:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-4

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	86		30 - 130	08/25/18 07:09	08/25/18 23:49	1
Phenol-d5 (Surr)	15		15 - 110	08/25/18 07:09	08/25/18 23:49	1
Terphenyl-d14 (Surr)	95		30 - 130	08/25/18 07:09	08/25/18 23:49	1
2,4,6-Tribromophenol (Surr)	84		15 - 110	08/25/18 07:09	08/25/18 23:49	1
2-Fluorophenol (Surr)	40		15 - 110	08/25/18 07:09	08/25/18 23:49	1
2-Fluorobiphenyl	86		30 - 130	08/25/18 07:09	08/25/18 23:49	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 00:18	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 00:18	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 00:18	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 00:18	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 00:18	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 00:18	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 00:18	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 00:18	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 00:18	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 00:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	63		30 - 150	08/24/18 18:58	08/26/18 00:18	1
Tetrachloro-m-xylene	64		30 - 150	08/24/18 18:58	08/26/18 00:18	1
DCB Decachlorobiphenyl	71		30 - 150	08/24/18 18:58	08/26/18 00:18	1
DCB Decachlorobiphenyl	75		30 - 150	08/24/18 18:58	08/26/18 00:18	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**8.48**		0.60	0.33	mg/L			08/26/18 12:11	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**170**	**D**	12.0	7.80	mg/L			08/27/18 06:59	100

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 08:49	08/28/18 16:00	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 08:49	08/28/18 16:00	2
Barium	**56.7**		4.0	1.1	ug/L		08/28/18 08:49	08/28/18 16:00	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 08:49	08/28/18 16:00	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 08:49	08/28/18 16:00	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/28/18 08:49	08/28/18 16:00	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 08:49	08/28/18 16:00	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 08:49	08/28/18 16:00	2
Manganese	**1420**		8.0	2.7	ug/L		08/28/18 08:49	08/28/18 16:00	2
Nickel	1.3	U	4.0	1.3	ug/L		08/28/18 08:49	08/28/18 16:00	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 08:49	08/28/18 16:00	2
Antimony	**1.0**	**J B**	2.0	0.62	ug/L		08/28/18 08:49	08/28/18 16:00	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 08:49	08/28/18 16:00	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 08:49	08/28/18 16:00	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 08:49	08/28/18 16:00	2

Client Sample ID: OB-4-082118

Date Collected: 08/21/18 16:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-4

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15.2**	**J**	40.0	15.0	ug/L		08/28/18 08:49	08/28/18 16:00	2
Sodium	**101000**		200	75.7	ug/L		08/28/18 08:49	08/28/18 16:00	2
Magnesium	**16000**		200	65.7	ug/L		08/28/18 08:49	08/28/18 16:00	2
Potassium	**2540**		200	64.9	ug/L		08/28/18 08:49	08/28/18 16:00	2
Calcium	**48100**		200	67.6	ug/L		08/28/18 08:49	08/28/18 16:00	2
Iron	**8160**		120	45.7	ug/L		08/28/18 08:49	08/28/18 16:00	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 08:49	08/28/18 16:00	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/25/18 04:15	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/25/18 04:15	2
Barium	**50.5**		4.0	1.1	ug/L		08/25/18 00:02	08/25/18 04:15	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/25/18 04:15	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/25/18 04:15	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 04:15	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 04:15	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/25/18 04:15	2
Manganese	**1250**		8.0	2.7	ug/L		08/25/18 00:02	08/25/18 04:15	2
Nickel	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 04:15	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/25/18 04:15	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/25/18 04:15	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/25/18 04:15	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/25/18 04:15	2
Zinc	5.4	U	16.0	5.4	ug/L		08/25/18 00:02	08/25/18 04:15	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/25/18 04:15	2
Sodium	**88200**		200	75.7	ug/L		08/25/18 00:02	08/25/18 04:15	2
Magnesium	**13300**		200	65.7	ug/L		08/25/18 00:02	08/25/18 04:15	2
Potassium	**2480**		200	64.9	ug/L		08/25/18 00:02	08/25/18 04:15	2
Calcium	**46100**		200	67.6	ug/L		08/25/18 00:02	08/25/18 04:15	2
Iron	**1040**		120	45.7	ug/L		08/25/18 00:02	08/25/18 04:15	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/25/18 04:15	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:15	08/24/18 14:57	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:21	1
Bicarbonate Alkalinity as CaCO3	**140**		5.0	5.0	mg/L			08/24/18 11:00	1
Alkalinity	**140**		5.0	5.0	mg/L			08/24/18 11:00	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-16-082118
Date Collected: 08/21/18 09:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 13:39	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 13:39	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*70 - 130*		*08/24/18 13:39*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 08:09	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 08:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 08:09	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 08:09	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 08:09	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 08:09	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 08:09	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 08:09	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 08:09	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 08:09	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 08:09	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 08:09	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 08:09	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 08:09	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 08:09	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 08:09	1
Acetone	**5.1**		5.0	5.0	ug/L			08/26/18 08:09	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 08:09	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 08:09	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 08:09	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 08:09	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 08:09	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 08:09	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 08:09	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 08:09	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 08:09	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 08:09	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 08:09	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 08:09	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 08:09	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 08:09	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 08:09	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 08:09	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 08:09	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 08:09	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/26/18 08:09	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 08:09	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 08:09	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/26/18 08:09	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 08:09	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 08:09	1

Client Sample ID: OB-16-082118
Date Collected: 08/21/18 09:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 08:09	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 08:09	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 08:09	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 08:09	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 08:09	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 08:09	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 08:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 08:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*08/26/18 08:09*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*08/26/18 08:09*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*08/26/18 08:09*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/26/18 08:09*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/24/18 09:07	08/24/18 16:44	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*08/24/18 09:07*	*08/24/18 16:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 07:09	08/26/18 17:16	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 07:09	08/26/18 17:16	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 07:09	08/26/18 17:16	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 07:09	08/26/18 17:16	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/25/18 07:09	08/26/18 17:16	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 07:09	08/26/18 17:16	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 07:09	08/26/18 17:16	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 07:09	08/26/18 17:16	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/25/18 07:09	08/26/18 17:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 07:09	08/26/18 00:10	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 07:09	08/26/18 00:10	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 07:09	08/26/18 00:10	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 00:10	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 00:10	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 00:10	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 07:09	08/26/18 00:10	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 00:10	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 07:09	08/26/18 00:10	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 07:09	08/26/18 00:10	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 07:09	08/26/18 00:10	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 07:09	08/26/18 00:10	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 07:09	08/26/18 00:10	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-16-082118
Date Collected: 08/21/18 09:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 07:09	08/26/18 00:10	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 07:09	08/26/18 00:10	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 07:09	08/26/18 00:10	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 07:09	08/26/18 00:10	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 00:10	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 07:09	08/26/18 00:10	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 07:09	08/26/18 00:10	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 00:10	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 07:09	08/26/18 00:10	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 00:10	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 07:09	08/26/18 00:10	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 07:09	08/26/18 00:10	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 07:09	08/26/18 00:10	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 07:09	08/26/18 00:10	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 07:09	08/26/18 00:10	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 00:10	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 00:10	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 07:09	08/26/18 00:10	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 07:09	08/26/18 00:10	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 07:09	08/26/18 00:10	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 07:09	08/26/18 00:10	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 07:09	08/26/18 00:10	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 07:09	08/26/18 00:10	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 00:10	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 00:10	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 00:10	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 00:10	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 00:10	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 00:10	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 07:09	08/26/18 00:10	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 07:09	08/26/18 00:10	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 07:09	08/26/18 00:10	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 07:09	08/26/18 00:10	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 07:09	08/26/18 00:10	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 07:09	08/26/18 00:10	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 00:10	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 00:10	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 07:09	08/26/18 00:10	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 07:09	08/26/18 00:10	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 00:10	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/26/18 00:10	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 00:10	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 00:10	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 00:10	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 00:10	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 00:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*9.8*	*J*	*ug/L*		*6.96*		*08/25/18 07:09*	*08/26/18 00:10*	*1*

Client Sample ID: OB-16-082118

Date Collected: 08/21/18 09:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-5

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*87*		*30 - 130*	*08/25/18 07:09*	*08/26/18 00:10*	*1*
Phenol-d5 (Surr)	*14*	*X*	*15 - 110*	*08/25/18 07:09*	*08/26/18 00:10*	*1*
Terphenyl-d14 (Surr)	*96*		*30 - 130*	*08/25/18 07:09*	*08/26/18 00:10*	*1*
2,4,6-Tribromophenol (Surr)	*90*		*15 - 110*	*08/25/18 07:09*	*08/26/18 00:10*	*1*
2-Fluorophenol (Surr)	*40*		*15 - 110*	*08/25/18 07:09*	*08/26/18 00:10*	*1*
2-Fluorobiphenyl	*93*		*30 - 130*	*08/25/18 07:09*	*08/26/18 00:10*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 00:41	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 00:41	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 00:41	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 00:41	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 00:41	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 00:41	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 00:41	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 00:41	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 00:41	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 00:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*30 - 150*	*08/24/18 18:58*	*08/26/18 00:41*	*1*
Tetrachloro-m-xylene	*63*		*30 - 150*	*08/24/18 18:58*	*08/26/18 00:41*	*1*
DCB Decachlorobiphenyl	*71*		*30 - 150*	*08/24/18 18:58*	*08/26/18 00:41*	*1*
DCB Decachlorobiphenyl	*74*		*30 - 150*	*08/24/18 18:58*	*08/26/18 00:41*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**9.38**		0.60	0.33	mg/L			08/26/18 12:23	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**72.6**	**D**	2.40	1.56	mg/L			08/27/18 07:13	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 09:26	08/28/18 16:03	2
Arsenic	**8.9**		2.0	0.77	ug/L		08/28/18 09:26	08/28/18 16:03	2
Barium	**104**		4.0	1.1	ug/L		08/28/18 09:26	08/28/18 16:03	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 09:26	08/28/18 16:03	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 09:26	08/28/18 16:03	2
Cobalt	**1.8**	**J**	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:03	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:03	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 09:26	08/28/18 16:03	2
Manganese	**3390**		8.0	2.7	ug/L		08/28/18 09:26	08/28/18 16:03	2
Nickel	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:03	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 09:26	08/28/18 16:03	2
Antimony	**1.0**	**J B**	2.0	0.62	ug/L		08/28/18 09:26	08/28/18 16:03	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 09:26	08/28/18 16:03	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 09:26	08/28/18 16:03	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 09:26	08/28/18 16:03	2

Client Sample ID: OB-16-082118
Date Collected: 08/21/18 09:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-5
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15.1**	**J**	40.0	15.0	ug/L		08/28/18 09:26	08/28/18 16:03	2
Sodium	**41500**		200	75.7	ug/L		08/28/18 09:26	08/28/18 16:03	2
Magnesium	**19100**		200	65.7	ug/L		08/28/18 09:26	08/28/18 16:03	2
Potassium	**10400**		200	64.9	ug/L		08/28/18 09:26	08/28/18 16:03	2
Calcium	**133000**		200	67.6	ug/L		08/28/18 09:26	08/28/18 16:03	2
Iron	**15900**		120	45.7	ug/L		08/28/18 09:26	08/28/18 16:03	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 09:26	08/28/18 16:03	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/25/18 04:22	2
Arsenic	**2.1**		2.0	0.77	ug/L		08/25/18 00:02	08/25/18 04:22	2
Barium	**75.1**		4.0	1.1	ug/L		08/25/18 00:02	08/25/18 04:22	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/25/18 04:22	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/25/18 04:22	2
Cobalt	**1.4**	**J**	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 04:22	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 04:22	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/25/18 04:22	2
Manganese	**2980**		8.0	2.7	ug/L		08/25/18 00:02	08/25/18 04:22	2
Nickel	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 04:22	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/25/18 04:22	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/25/18 04:22	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/25/18 04:22	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/25/18 04:22	2
Zinc	5.4	U	16.0	5.4	ug/L		08/25/18 00:02	08/25/18 04:22	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/25/18 04:22	2
Sodium	**35400**		200	75.7	ug/L		08/25/18 00:02	08/25/18 04:22	2
Magnesium	**15000**		200	65.7	ug/L		08/25/18 00:02	08/25/18 04:22	2
Potassium	**9400**		200	64.9	ug/L		08/25/18 00:02	08/25/18 04:22	2
Calcium	**121000**		200	67.6	ug/L		08/25/18 00:02	08/25/18 04:22	2
Iron	**1980**		120	45.7	ug/L		08/25/18 00:02	08/25/18 04:22	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/25/18 04:22	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:15	08/24/18 14:58	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:25	1
Bicarbonate Alkalinity as CaCO3	**388**		5.0	5.0	mg/L			08/24/18 11:10	1
Alkalinity	**388**		5.0	5.0	mg/L			08/24/18 11:10	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-18-082118
Date Collected: 08/21/18 10:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 14:02	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 14:02	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*70 - 130*		*08/24/18 14:02*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 08:31	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 08:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 08:31	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 08:31	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 08:31	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 08:31	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 08:31	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 08:31	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 08:31	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 08:31	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 08:31	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 08:31	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 08:31	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 08:31	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 08:31	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 08:31	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 08:31	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 08:31	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 08:31	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 08:31	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 08:31	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 08:31	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 08:31	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 08:31	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 08:31	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 08:31	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 08:31	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 08:31	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 08:31	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 08:31	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 08:31	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 08:31	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 08:31	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 08:31	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 08:31	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/26/18 08:31	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 08:31	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 08:31	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/26/18 08:31	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 08:31	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 08:31	1

Client Sample ID: OB-18-082118
Date Collected: 08/21/18 10:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 08:31	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 08:31	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 08:31	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 08:31	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 08:31	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 08:31	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 08:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 08:31*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/18 08:31*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*08/26/18 08:31*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*08/26/18 08:31*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/26/18 08:31*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/24/18 09:07	08/24/18 17:02	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/24/18 09:07*	*08/24/18 17:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**0.082**		0.050	0.016	ug/L		08/25/18 07:09	08/27/18 20:58	1
Benzo[a]pyrene	**0.026**	**J**	0.050	0.022	ug/L		08/25/18 07:09	08/27/18 20:58	1
Benzo[b]fluoranthene	**0.17**		0.050	0.024	ug/L		08/25/18 07:09	08/27/18 20:58	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 07:09	08/27/18 20:58	1
Dibenz(a,h)anthracene	**0.25**	*****	0.050	0.011	ug/L		08/25/18 07:09	08/27/18 20:58	1
Hexachlorobenzene	**0.030**		0.020	0.013	ug/L		08/25/18 07:09	08/27/18 20:58	1
Indeno[1,2,3-cd]pyrene	**0.18**		0.050	0.036	ug/L		08/25/18 07:09	08/27/18 20:58	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 07:09	08/27/18 20:58	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/25/18 07:09	08/27/18 20:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 07:09	08/26/18 00:31	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 07:09	08/26/18 00:31	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 07:09	08/26/18 00:31	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 00:31	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 00:31	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 00:31	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 07:09	08/26/18 00:31	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 00:31	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 07:09	08/26/18 00:31	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 07:09	08/26/18 00:31	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 07:09	08/26/18 00:31	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 07:09	08/26/18 00:31	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 07:09	08/26/18 00:31	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-18-082118
Date Collected: 08/21/18 10:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 07:09	08/26/18 00:31	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 07:09	08/26/18 00:31	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 07:09	08/26/18 00:31	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 07:09	08/26/18 00:31	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 00:31	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 07:09	08/26/18 00:31	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 07:09	08/26/18 00:31	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 00:31	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 07:09	08/26/18 00:31	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 00:31	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 07:09	08/26/18 00:31	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 07:09	08/26/18 00:31	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 07:09	08/26/18 00:31	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 07:09	08/26/18 00:31	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 07:09	08/26/18 00:31	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 00:31	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 00:31	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 07:09	08/26/18 00:31	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 07:09	08/26/18 00:31	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 07:09	08/26/18 00:31	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 07:09	08/26/18 00:31	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 07:09	08/26/18 00:31	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 07:09	08/26/18 00:31	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 00:31	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 00:31	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 00:31	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 00:31	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 00:31	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 00:31	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 07:09	08/26/18 00:31	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 07:09	08/26/18 00:31	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 07:09	08/26/18 00:31	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 07:09	08/26/18 00:31	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 07:09	08/26/18 00:31	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 07:09	08/26/18 00:31	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 00:31	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 00:31	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 07:09	08/26/18 00:31	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 07:09	08/26/18 00:31	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 00:31	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/26/18 00:31	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 00:31	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 00:31	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 00:31	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 00:31	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 00:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 07:09*	*08/26/18 00:31*	*1*

Client Sample ID: OB-18-082118

Date Collected: 08/21/18 10:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	88		30 - 130	08/25/18 07:09	08/26/18 00:31	1
Phenol-d5 (Surr)	14	X	15 - 110	08/25/18 07:09	08/26/18 00:31	1
Terphenyl-d14 (Surr)	100		30 - 130	08/25/18 07:09	08/26/18 00:31	1
2,4,6-Tribromophenol (Surr)	72		15 - 110	08/25/18 07:09	08/26/18 00:31	1
2-Fluorophenol (Surr)	38		15 - 110	08/25/18 07:09	08/26/18 00:31	1
2-Fluorobiphenyl	96		30 - 130	08/25/18 07:09	08/26/18 00:31	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:04	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:04	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:04	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:04	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:04	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:04	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 01:04	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 01:04	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 01:04	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 01:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	65		30 - 150	08/24/18 18:58	08/26/18 01:04	1
Tetrachloro-m-xylene	65		30 - 150	08/24/18 18:58	08/26/18 01:04	1
DCB Decachlorobiphenyl	73		30 - 150	08/24/18 18:58	08/26/18 01:04	1
DCB Decachlorobiphenyl	75		30 - 150	08/24/18 18:58	08/26/18 01:04	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.58**	**F1**	0.12	0.078	mg/L			08/26/18 12:34	1
Sulfate	**9.85**		0.60	0.33	mg/L			08/26/18 12:34	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 09:26	08/28/18 16:06	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 09:26	08/28/18 16:06	2
Barium	**7.7**		4.0	1.1	ug/L		08/28/18 09:26	08/28/18 16:06	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 09:26	08/28/18 16:06	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 09:26	08/28/18 16:06	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:06	2
Chromium	**1.3**	**J**	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:06	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 09:26	08/28/18 16:06	2
Manganese	**4.9**	**J**	8.0	2.7	ug/L		08/28/18 09:26	08/28/18 16:06	2
Nickel	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:06	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 09:26	08/28/18 16:06	2
Antimony	**0.86**	**J B**	2.0	0.62	ug/L		08/28/18 09:26	08/28/18 16:06	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 09:26	08/28/18 16:06	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 09:26	08/28/18 16:06	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 09:26	08/28/18 16:06	2
Aluminum	**117**		40.0	15.0	ug/L		08/28/18 09:26	08/28/18 16:06	2
Sodium	**6020**		200	75.7	ug/L		08/28/18 09:26	08/28/18 16:06	2
Magnesium	**8870**		200	65.7	ug/L		08/28/18 09:26	08/28/18 16:06	2

Client Sample ID: OB-18-082118

Lab Sample ID: 460-163149-6

Date Collected: 08/21/18 10:00

Matrix: Water

Date Received: 08/22/18 16:45

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**432**		200	64.9	ug/L		08/28/18 09:26	08/28/18 16:06	2
Calcium	**37700**		200	67.6	ug/L		08/28/18 09:26	08/28/18 16:06	2
Iron	**169**		120	45.7	ug/L		08/28/18 09:26	08/28/18 16:06	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 09:26	08/28/18 16:06	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/30/18 01:49	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/30/18 01:49	2
Barium	**7.3**		4.0	1.1	ug/L		08/25/18 00:02	08/30/18 01:49	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/30/18 01:49	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/30/18 01:49	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 01:49	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 01:49	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/30/18 01:49	2
Manganese	2.7	U	8.0	2.7	ug/L		08/25/18 00:02	08/30/18 01:49	2
Nickel	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 01:49	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/30/18 01:49	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/30/18 01:49	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/30/18 01:49	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/30/18 01:49	2
Zinc	**5.6**	**J**	16.0	5.4	ug/L		08/25/18 00:02	08/30/18 01:49	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/30/18 01:49	2
Sodium	**16400**		200	75.7	ug/L		08/25/18 00:02	08/30/18 01:49	2
Magnesium	**6840**		200	65.7	ug/L		08/25/18 00:02	08/30/18 01:49	2
Potassium	**388**		200	64.9	ug/L		08/25/18 00:02	08/30/18 01:49	2
Calcium	**34200**		200	67.6	ug/L		08/25/18 00:02	08/30/18 01:49	2
Iron	45.7	U	120	45.7	ug/L		08/25/18 00:02	08/30/18 01:49	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/30/18 01:49	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:15	08/24/18 15:00	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:26	1
Bicarbonate Alkalinity as CaCO3	**153**		5.0	5.0	mg/L			08/24/18 11:17	1
Alkalinity	**153**		5.0	5.0	mg/L			08/24/18 11:17	1

Client Sample ID: OB-17-082118

Lab Sample ID: 460-163149-7

Date Collected: 08/21/18 12:05

Matrix: Water

Date Received: 08/22/18 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 14:26	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-17-082118
Date Collected: 08/21/18 12:05
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 14:26	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*70 - 130*		*08/24/18 14:26*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 08:54	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 08:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 08:54	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 08:54	1
1,1-Dichloroethane	**0.79**	**J**	1.0	0.26	ug/L			08/26/18 08:54	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 08:54	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 08:54	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 08:54	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 08:54	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 08:54	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 08:54	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 08:54	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 08:54	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 08:54	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 08:54	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 08:54	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 08:54	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 08:54	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 08:54	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 08:54	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 08:54	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 08:54	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 08:54	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 08:54	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 08:54	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 08:54	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 08:54	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 08:54	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 08:54	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 08:54	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 08:54	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 08:54	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 08:54	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 08:54	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 08:54	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/26/18 08:54	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 08:54	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 08:54	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/26/18 08:54	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 08:54	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 08:54	1
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 08:54	1

Client Sample ID: OB-17-082118
Date Collected: 08/21/18 12:05
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 08:54	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 08:54	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 08:54	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 08:54	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 08:54	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 08:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 08:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/18 08:54*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*08/26/18 08:54*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/26/18 08:54*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*08/26/18 08:54*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	11		0.20	0.016	ug/L		08/24/18 09:07	08/24/18 17:20	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*08/24/18 09:07*	*08/24/18 17:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 07:09	08/26/18 17:58	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 07:09	08/26/18 17:58	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 07:09	08/26/18 17:58	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 07:09	08/26/18 17:58	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/25/18 07:09	08/26/18 17:58	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 07:09	08/26/18 17:58	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 07:09	08/26/18 17:58	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 07:09	08/26/18 17:58	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/25/18 07:09	08/26/18 17:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 07:09	08/26/18 00:51	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 07:09	08/26/18 00:51	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 07:09	08/26/18 00:51	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 00:51	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 00:51	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 00:51	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 07:09	08/26/18 00:51	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 00:51	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 07:09	08/26/18 00:51	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 07:09	08/26/18 00:51	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 07:09	08/26/18 00:51	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 07:09	08/26/18 00:51	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 07:09	08/26/18 00:51	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 07:09	08/26/18 00:51	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-17-082118
Date Collected: 08/21/18 12:05
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 07:09	08/26/18 00:51	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 07:09	08/26/18 00:51	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 07:09	08/26/18 00:51	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 00:51	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 07:09	08/26/18 00:51	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 07:09	08/26/18 00:51	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 00:51	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 07:09	08/26/18 00:51	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 00:51	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 07:09	08/26/18 00:51	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 07:09	08/26/18 00:51	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 07:09	08/26/18 00:51	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 07:09	08/26/18 00:51	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 07:09	08/26/18 00:51	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 00:51	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 00:51	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 07:09	08/26/18 00:51	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 07:09	08/26/18 00:51	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 07:09	08/26/18 00:51	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 07:09	08/26/18 00:51	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 07:09	08/26/18 00:51	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 07:09	08/26/18 00:51	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 00:51	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 00:51	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 00:51	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 00:51	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 00:51	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 00:51	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 07:09	08/26/18 00:51	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 07:09	08/26/18 00:51	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 07:09	08/26/18 00:51	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 07:09	08/26/18 00:51	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 07:09	08/26/18 00:51	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 07:09	08/26/18 00:51	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 00:51	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 00:51	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 07:09	08/26/18 00:51	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 07:09	08/26/18 00:51	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 00:51	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/26/18 00:51	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 00:51	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 00:51	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 00:51	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 00:51	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 00:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 07:09*	*08/26/18 00:51*	*1*

Client Sample ID: OB-17-082118

Date Collected: 08/21/18 12:05
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-7

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	81		30 - 130	08/25/18 07:09	08/26/18 00:51	1
Phenol-d5 (Surr)	13	X	15 - 110	08/25/18 07:09	08/26/18 00:51	1
Terphenyl-d14 (Surr)	91		30 - 130	08/25/18 07:09	08/26/18 00:51	1
2,4,6-Tribromophenol (Surr)	87		15 - 110	08/25/18 07:09	08/26/18 00:51	1
2-Fluorophenol (Surr)	37		15 - 110	08/25/18 07:09	08/26/18 00:51	1
2-Fluorobiphenyl	89		30 - 130	08/25/18 07:09	08/26/18 00:51	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:28	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:28	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:28	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:28	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:28	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:28	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 01:28	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 01:28	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 01:28	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 01:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	63		30 - 150	08/24/18 18:58	08/26/18 01:28	1
Tetrachloro-m-xylene	63		30 - 150	08/24/18 18:58	08/26/18 01:28	1
DCB Decachlorobiphenyl	70		30 - 150	08/24/18 18:58	08/26/18 01:28	1
DCB Decachlorobiphenyl	72		30 - 150	08/24/18 18:58	08/26/18 01:28	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.9**	**D**	0.60	0.39	mg/L			08/27/18 07:26	5
Sulfate	**36.4**	**D**	3.00	1.66	mg/L			08/27/18 07:26	5

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 09:26	08/28/18 16:08	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 09:26	08/28/18 16:08	2
Barium	**10.3**		4.0	1.1	ug/L		08/28/18 09:26	08/28/18 16:08	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 09:26	08/28/18 16:08	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 09:26	08/28/18 16:08	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:08	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:08	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 09:26	08/28/18 16:08	2
Manganese	**308**		8.0	2.7	ug/L		08/28/18 09:26	08/28/18 16:08	2
Nickel	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:08	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 09:26	08/28/18 16:08	2
Antimony	**1.0**	**J B**	2.0	0.62	ug/L		08/28/18 09:26	08/28/18 16:08	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 09:26	08/28/18 16:08	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 09:26	08/28/18 16:08	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 09:26	08/28/18 16:08	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/28/18 09:26	08/28/18 16:08	2
Sodium	**15500**		200	75.7	ug/L		08/28/18 09:26	08/28/18 16:08	2
Magnesium	**30700**		200	65.7	ug/L		08/28/18 09:26	08/28/18 16:08	2

Client Sample ID: OB-17-082118

Lab Sample ID: 460-163149-7
Matrix: Water
Date Collected: 08/21/18 12:05
Date Received: 08/22/18 16:45

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**821**		200	64.9	ug/L		08/28/18 09:26	08/28/18 16:08	2
Calcium	**92400**		200	67.6	ug/L		08/28/18 09:26	08/28/18 16:08	2
Iron	**1750**		120	45.7	ug/L		08/28/18 09:26	08/28/18 16:08	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 09:26	08/28/18 16:08	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/25/18 04:32	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/25/18 04:32	2
Barium	**11.3**		4.0	1.1	ug/L		08/25/18 00:02	08/25/18 04:32	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/25/18 04:32	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/25/18 04:32	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 04:32	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 04:32	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/25/18 04:32	2
Manganese	**300**		8.0	2.7	ug/L		08/25/18 00:02	08/25/18 04:32	2
Nickel	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 04:32	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/25/18 04:32	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/25/18 04:32	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/25/18 04:32	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/25/18 04:32	2
Zinc	5.4	U	16.0	5.4	ug/L		08/25/18 00:02	08/25/18 04:32	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/25/18 04:32	2
Sodium	**13300**		200	75.7	ug/L		08/25/18 00:02	08/25/18 04:32	2
Magnesium	**25500**		200	65.7	ug/L		08/25/18 00:02	08/25/18 04:32	2
Potassium	**854**		200	64.9	ug/L		08/25/18 00:02	08/25/18 04:32	2
Calcium	**86600**		200	67.6	ug/L		08/25/18 00:02	08/25/18 04:32	2
Iron	**154**		120	45.7	ug/L		08/25/18 00:02	08/25/18 04:32	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/25/18 04:32	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:15	08/24/18 15:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:27	1
Bicarbonate Alkalinity as CaCO3	**325**		5.0	5.0	mg/L			08/24/18 11:26	1
Alkalinity	**325**		5.0	5.0	mg/L			08/24/18 11:26	1

Client Sample ID: Dup-01-082118

Lab Sample ID: 460-163149-8
Matrix: Water
Date Collected: 08/21/18 12:00
Date Received: 08/22/18 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 14:49	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: Dup-01-082118
Date Collected: 08/21/18 12:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 14:49	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*70 - 130*		*08/24/18 14:49*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 09:16	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 09:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 09:16	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 09:16	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 09:16	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 09:16	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 09:16	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 09:16	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 09:16	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 09:16	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 09:16	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 09:16	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 09:16	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 09:16	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 09:16	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 09:16	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 09:16	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 09:16	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 09:16	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 09:16	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 09:16	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 09:16	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 09:16	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 09:16	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 09:16	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 09:16	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 09:16	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 09:16	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 09:16	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 09:16	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 09:16	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 09:16	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 09:16	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 09:16	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 09:16	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/26/18 09:16	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 09:16	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 09:16	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/26/18 09:16	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 09:16	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 09:16	1
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 09:16	1

Client Sample ID: Dup-01-082118
Date Collected: 08/21/18 12:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 09:16	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 09:16	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 09:16	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 09:16	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 09:16	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 09:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 09:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/26/18 09:16*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*08/26/18 09:16*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*08/26/18 09:16*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/26/18 09:16*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/24/18 09:07	08/24/18 17:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*10 - 150*	*08/24/18 09:07*	*08/24/18 17:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 07:09	08/26/18 18:19	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 07:09	08/26/18 18:19	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 07:09	08/26/18 18:19	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 07:09	08/26/18 18:19	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/25/18 07:09	08/26/18 18:19	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 07:09	08/26/18 18:19	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 07:09	08/26/18 18:19	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 07:09	08/26/18 18:19	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/25/18 07:09	08/26/18 18:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 07:09	08/26/18 01:12	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 07:09	08/26/18 01:12	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 07:09	08/26/18 01:12	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 01:12	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 01:12	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 01:12	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 07:09	08/26/18 01:12	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 01:12	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 07:09	08/26/18 01:12	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 07:09	08/26/18 01:12	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 07:09	08/26/18 01:12	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 07:09	08/26/18 01:12	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 07:09	08/26/18 01:12	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 07:09	08/26/18 01:12	1

Client Sample ID: Dup-01-082118
Date Collected: 08/21/18 12:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 07:09	08/26/18 01:12	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 07:09	08/26/18 01:12	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 07:09	08/26/18 01:12	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 01:12	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 07:09	08/26/18 01:12	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 07:09	08/26/18 01:12	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 01:12	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 07:09	08/26/18 01:12	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 01:12	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 07:09	08/26/18 01:12	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 07:09	08/26/18 01:12	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 07:09	08/26/18 01:12	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 07:09	08/26/18 01:12	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 07:09	08/26/18 01:12	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 01:12	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 01:12	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 07:09	08/26/18 01:12	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 07:09	08/26/18 01:12	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 07:09	08/26/18 01:12	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 07:09	08/26/18 01:12	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 07:09	08/26/18 01:12	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 07:09	08/26/18 01:12	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 01:12	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 01:12	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 01:12	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 01:12	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 01:12	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 01:12	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 07:09	08/26/18 01:12	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 07:09	08/26/18 01:12	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 07:09	08/26/18 01:12	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 07:09	08/26/18 01:12	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 07:09	08/26/18 01:12	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 07:09	08/26/18 01:12	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 01:12	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 01:12	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 07:09	08/26/18 01:12	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 07:09	08/26/18 01:12	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 01:12	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/26/18 01:12	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 01:12	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 01:12	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 01:12	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 01:12	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 01:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*6.6*	*J*	*ug/L*		*14.85*		*08/25/18 07:09*	*08/26/18 01:12*	*1*

Client Sample ID: Dup-01-082118

Date Collected: 08/21/18 12:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	71		30 - 130	08/25/18 07:09	08/26/18 01:12	1
Phenol-d5 (Surr)	11	X	15 - 110	08/25/18 07:09	08/26/18 01:12	1
Terphenyl-d14 (Surr)	99		30 - 130	08/25/18 07:09	08/26/18 01:12	1
2,4,6-Tribromophenol (Surr)	82		15 - 110	08/25/18 07:09	08/26/18 01:12	1
2-Fluorophenol (Surr)	32		15 - 110	08/25/18 07:09	08/26/18 01:12	1
2-Fluorobiphenyl	73		30 - 130	08/25/18 07:09	08/26/18 01:12	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:51	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:51	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:51	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:51	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:51	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 01:51	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 01:51	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 01:51	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 01:51	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 01:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	62		30 - 150	08/24/18 18:58	08/26/18 01:51	1
Tetrachloro-m-xylene	63		30 - 150	08/24/18 18:58	08/26/18 01:51	1
DCB Decachlorobiphenyl	70		30 - 150	08/24/18 18:58	08/26/18 01:51	1
DCB Decachlorobiphenyl	75		30 - 150	08/24/18 18:58	08/26/18 01:51	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.79**		0.12	0.078	mg/L			08/26/18 12:56	1
Sulfate	**9.84**		0.60	0.33	mg/L			08/26/18 12:56	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 09:26	08/28/18 16:11	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 09:26	08/28/18 16:11	2
Barium	**7.1**		4.0	1.1	ug/L		08/28/18 09:26	08/28/18 16:11	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 09:26	08/28/18 16:11	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 09:26	08/28/18 16:11	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:11	2
Chromium	**1.5**	**J**	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:11	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 09:26	08/28/18 16:11	2
Manganese	**3.0**	**J**	8.0	2.7	ug/L		08/28/18 09:26	08/28/18 16:11	2
Nickel	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:11	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 09:26	08/28/18 16:11	2
Antimony	**0.99**	**J B**	2.0	0.62	ug/L		08/28/18 09:26	08/28/18 16:11	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 09:26	08/28/18 16:11	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 09:26	08/28/18 16:11	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 09:26	08/28/18 16:11	2
Aluminum	**74.8**		40.0	15.0	ug/L		08/28/18 09:26	08/28/18 16:11	2
Sodium	**6010**		200	75.7	ug/L		08/28/18 09:26	08/28/18 16:11	2
Magnesium	**8820**		200	65.7	ug/L		08/28/18 09:26	08/28/18 16:11	2

Client Sample ID: Dup-01-082118

Lab Sample ID: 460-163149-8

Date Collected: 08/21/18 12:00

Matrix: Water

Date Received: 08/22/18 16:45

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**423**		200	64.9	ug/L		08/28/18 09:26	08/28/18 16:11	2
Calcium	**36900**		200	67.6	ug/L		08/28/18 09:26	08/28/18 16:11	2
Iron	**108**	**J**	120	45.7	ug/L		08/28/18 09:26	08/28/18 16:11	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 09:26	08/28/18 16:11	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/30/18 01:56	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/30/18 01:56	2
Barium	**5.6**		4.0	1.1	ug/L		08/25/18 00:02	08/30/18 01:56	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/30/18 01:56	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/30/18 01:56	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 01:56	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 01:56	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/30/18 01:56	2
Manganese	2.7	U	8.0	2.7	ug/L		08/25/18 00:02	08/30/18 01:56	2
Nickel	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 01:56	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/30/18 01:56	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/30/18 01:56	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/30/18 01:56	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/30/18 01:56	2
Zinc	5.4	U	16.0	5.4	ug/L		08/25/18 00:02	08/30/18 01:56	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/30/18 01:56	2
Sodium	**4360**		200	75.7	ug/L		08/25/18 00:02	08/30/18 01:56	2
Magnesium	**6240**		200	65.7	ug/L		08/25/18 00:02	08/30/18 01:56	2
Potassium	**344**		200	64.9	ug/L		08/25/18 00:02	08/30/18 01:56	2
Calcium	**31600**		200	67.6	ug/L		08/25/18 00:02	08/30/18 01:56	2
Iron	45.7	U	120	45.7	ug/L		08/25/18 00:02	08/30/18 01:56	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/30/18 01:56	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:15	08/24/18 15:07	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:28	1
Bicarbonate Alkalinity as CaCO3	**125**		5.0	5.0	mg/L			08/24/18 11:33	1
Alkalinity	**125**		5.0	5.0	mg/L			08/24/18 11:33	1

Client Sample ID: OB-28-082118

Lab Sample ID: 460-163149-9

Date Collected: 08/21/18 12:35

Matrix: Water

Date Received: 08/22/18 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 15:12	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-28-082118
Date Collected: 08/21/18 12:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 15:12	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*70 - 130*		*08/24/18 15:12*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 09:39	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 09:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 09:39	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 09:39	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 09:39	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 09:39	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 09:39	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 09:39	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 09:39	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 09:39	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 09:39	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 09:39	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 09:39	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 09:39	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 09:39	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 09:39	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 09:39	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 09:39	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 09:39	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 09:39	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 09:39	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 09:39	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 09:39	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 09:39	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 09:39	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 09:39	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 09:39	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 09:39	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 09:39	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 09:39	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 09:39	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 09:39	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 09:39	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 09:39	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 09:39	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/26/18 09:39	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 09:39	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 09:39	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/26/18 09:39	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 09:39	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 09:39	1
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 09:39	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-28-082118
Date Collected: 08/21/18 12:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 09:39	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 09:39	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 09:39	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 09:39	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 09:39	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 09:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 09:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/26/18 09:39*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*08/26/18 09:39*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/26/18 09:39*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*08/26/18 09:39*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.017	U	0.22	0.017	ug/L		08/24/18 09:07	08/24/18 17:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*43*		*10 - 150*	*08/24/18 09:07*	*08/24/18 17:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 07:09	08/26/18 18:40	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 07:09	08/26/18 18:40	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 07:09	08/26/18 18:40	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 07:09	08/26/18 18:40	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/25/18 07:09	08/26/18 18:40	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 07:09	08/26/18 18:40	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 07:09	08/26/18 18:40	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 07:09	08/26/18 18:40	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/25/18 07:09	08/26/18 18:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 07:09	08/26/18 01:33	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 07:09	08/26/18 01:33	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 07:09	08/26/18 01:33	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 01:33	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 01:33	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 01:33	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 07:09	08/26/18 01:33	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 01:33	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 07:09	08/26/18 01:33	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 07:09	08/26/18 01:33	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 07:09	08/26/18 01:33	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 07:09	08/26/18 01:33	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 07:09	08/26/18 01:33	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 07:09	08/26/18 01:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-28-082118
Date Collected: 08/21/18 12:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 07:09	08/26/18 01:33	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 07:09	08/26/18 01:33	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 07:09	08/26/18 01:33	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 01:33	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 07:09	08/26/18 01:33	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 07:09	08/26/18 01:33	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 01:33	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 07:09	08/26/18 01:33	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 01:33	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 07:09	08/26/18 01:33	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 07:09	08/26/18 01:33	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 07:09	08/26/18 01:33	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 07:09	08/26/18 01:33	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 07:09	08/26/18 01:33	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 01:33	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 01:33	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 07:09	08/26/18 01:33	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 07:09	08/26/18 01:33	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 07:09	08/26/18 01:33	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 07:09	08/26/18 01:33	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 07:09	08/26/18 01:33	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 07:09	08/26/18 01:33	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 01:33	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 01:33	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 01:33	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 01:33	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 01:33	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 01:33	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 07:09	08/26/18 01:33	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 07:09	08/26/18 01:33	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 07:09	08/26/18 01:33	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 07:09	08/26/18 01:33	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 07:09	08/26/18 01:33	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 07:09	08/26/18 01:33	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 01:33	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 01:33	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 07:09	08/26/18 01:33	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 07:09	08/26/18 01:33	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 01:33	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/26/18 01:33	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 01:33	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 01:33	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 01:33	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 01:33	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 01:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 07:09*	*08/26/18 01:33*	*1*

Client Sample ID: OB-28-082118
Date Collected: 08/21/18 12:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-9
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	82		30 - 130	08/25/18 07:09	08/26/18 01:33	1
Phenol-d5 (Surr)	14	X	15 - 110	08/25/18 07:09	08/26/18 01:33	1
Terphenyl-d14 (Surr)	96		30 - 130	08/25/18 07:09	08/26/18 01:33	1
2,4,6-Tribromophenol (Surr)	92		15 - 110	08/25/18 07:09	08/26/18 01:33	1
2-Fluorophenol (Surr)	38		15 - 110	08/25/18 07:09	08/26/18 01:33	1
2-Fluorobiphenyl	87		30 - 130	08/25/18 07:09	08/26/18 01:33	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 02:14	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 02:14	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 02:14	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 02:14	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 02:14	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 02:14	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 02:14	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 02:14	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 02:14	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 02:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	69		30 - 150	08/24/18 18:58	08/26/18 02:14	1
Tetrachloro-m-xylene	71		30 - 150	08/24/18 18:58	08/26/18 02:14	1
DCB Decachlorobiphenyl	79		30 - 150	08/24/18 18:58	08/26/18 02:14	1
DCB Decachlorobiphenyl	84		30 - 150	08/24/18 18:58	08/26/18 02:14	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**26.2**	**D**	3.00	1.66	mg/L			08/27/18 07:53	5

Method: 9056A - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**108**	**D**	6.00	3.90	mg/L			08/27/18 07:40	50

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 09:26	08/28/18 16:16	2
Arsenic	**0.99**	**J**	2.0	0.77	ug/L		08/28/18 09:26	08/28/18 16:16	2
Barium	**71.3**		4.0	1.1	ug/L		08/28/18 09:26	08/28/18 16:16	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 09:26	08/28/18 16:16	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 09:26	08/28/18 16:16	2
Cobalt	**2.0**	**J**	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:16	2
Chromium	**2.1**	**J**	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:16	2
Copper	**6.7**		4.0	1.9	ug/L		08/28/18 09:26	08/28/18 16:16	2
Manganese	**3270**		8.0	2.7	ug/L		08/28/18 09:26	08/28/18 16:16	2
Nickel	**3.1**	**J**	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:16	2
Lead	**1.0**	**J**	1.2	0.37	ug/L		08/28/18 09:26	08/28/18 16:16	2
Antimony	**0.68**	**J B**	2.0	0.62	ug/L		08/28/18 09:26	08/28/18 16:16	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 09:26	08/28/18 16:16	2
Vanadium	**3.0**	**J**	4.0	1.2	ug/L		08/28/18 09:26	08/28/18 16:16	2
Zinc	**7.6**	**J**	16.0	5.4	ug/L		08/28/18 09:26	08/28/18 16:16	2

Client Sample ID: OB-28-082118

Date Collected: 08/21/18 12:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-9

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1190**		40.0	15.0	ug/L		08/28/18 09:26	08/28/18 16:16	2
Sodium	**22400**		200	75.7	ug/L		08/28/18 09:26	08/28/18 16:16	2
Magnesium	**28200**		200	65.7	ug/L		08/28/18 09:26	08/28/18 16:16	2
Potassium	**3870**		200	64.9	ug/L		08/28/18 09:26	08/28/18 16:16	2
Calcium	**124000**		200	67.6	ug/L		08/28/18 09:26	08/28/18 16:16	2
Iron	**3260**		120	45.7	ug/L		08/28/18 09:26	08/28/18 16:16	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 09:26	08/28/18 16:16	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/25/18 04:39	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/25/18 04:39	2
Barium	**65.7**		4.0	1.1	ug/L		08/25/18 00:02	08/25/18 04:39	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/25/18 04:39	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/25/18 04:39	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 04:39	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 04:39	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/25/18 04:39	2
Manganese	**2930**		8.0	2.7	ug/L		08/25/18 00:02	08/25/18 04:39	2
Nickel	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 04:39	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/25/18 04:39	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/25/18 04:39	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/25/18 04:39	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/25/18 04:39	2
Zinc	5.4	U	16.0	5.4	ug/L		08/25/18 00:02	08/25/18 04:39	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/25/18 04:39	2
Sodium	**20000**		200	75.7	ug/L		08/25/18 00:02	08/25/18 04:39	2
Magnesium	**25200**		200	65.7	ug/L		08/25/18 00:02	08/25/18 04:39	2
Potassium	**3660**		200	64.9	ug/L		08/25/18 00:02	08/25/18 04:39	2
Calcium	**126000**		200	67.6	ug/L		08/25/18 00:02	08/25/18 04:39	2
Iron	45.7	U	120	45.7	ug/L		08/25/18 00:02	08/25/18 04:39	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/25/18 04:39	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:06	08/24/18 14:19	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:29	1
Bicarbonate Alkalinity as CaCO3	**326**		5.0	5.0	mg/L			08/24/18 11:43	1
Alkalinity	**326**		5.0	5.0	mg/L			08/24/18 11:43	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-22-082118
Date Collected: 08/21/18 13:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 15:36	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 15:36	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*70 - 130*		*08/24/18 15:36*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 10:01	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 10:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 10:01	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 10:01	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 10:01	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 10:01	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 10:01	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 10:01	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 10:01	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 10:01	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 10:01	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 10:01	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 10:01	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 10:01	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 10:01	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 10:01	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 10:01	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 10:01	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 10:01	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 10:01	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 10:01	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 10:01	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 10:01	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 10:01	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 10:01	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 10:01	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 10:01	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 10:01	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 10:01	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 10:01	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 10:01	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 10:01	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 10:01	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 10:01	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 10:01	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/26/18 10:01	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 10:01	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 10:01	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/26/18 10:01	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 10:01	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 10:01	1

Client Sample ID: OB-22-082118
Date Collected: 08/21/18 13:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 10:01	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 10:01	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 10:01	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 10:01	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 10:01	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 10:01	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 10:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 10:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/18 10:01*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*08/26/18 10:01*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*08/26/18 10:01*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*08/26/18 10:01*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/24/18 09:07	08/24/18 18:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*42*		*10 - 150*	*08/24/18 09:07*	*08/24/18 18:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 07:09	08/26/18 19:01	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 07:09	08/26/18 19:01	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 07:09	08/26/18 19:01	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 07:09	08/26/18 19:01	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/25/18 07:09	08/26/18 19:01	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 07:09	08/26/18 19:01	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 07:09	08/26/18 19:01	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 07:09	08/26/18 19:01	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/25/18 07:09	08/26/18 19:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 07:09	08/26/18 01:54	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 07:09	08/26/18 01:54	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 07:09	08/26/18 01:54	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 01:54	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 01:54	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 01:54	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 07:09	08/26/18 01:54	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 01:54	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 07:09	08/26/18 01:54	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 07:09	08/26/18 01:54	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 07:09	08/26/18 01:54	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 07:09	08/26/18 01:54	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 07:09	08/26/18 01:54	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-22-082118
Date Collected: 08/21/18 13:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 07:09	08/26/18 01:54	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 07:09	08/26/18 01:54	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 07:09	08/26/18 01:54	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 07:09	08/26/18 01:54	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 01:54	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 07:09	08/26/18 01:54	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 07:09	08/26/18 01:54	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 01:54	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 07:09	08/26/18 01:54	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 01:54	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 07:09	08/26/18 01:54	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 07:09	08/26/18 01:54	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 07:09	08/26/18 01:54	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 07:09	08/26/18 01:54	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 07:09	08/26/18 01:54	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 01:54	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 01:54	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 07:09	08/26/18 01:54	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 07:09	08/26/18 01:54	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 07:09	08/26/18 01:54	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 07:09	08/26/18 01:54	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 07:09	08/26/18 01:54	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 07:09	08/26/18 01:54	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 01:54	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 01:54	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 01:54	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 01:54	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 01:54	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 01:54	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 07:09	08/26/18 01:54	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 07:09	08/26/18 01:54	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 07:09	08/26/18 01:54	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 07:09	08/26/18 01:54	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 07:09	08/26/18 01:54	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 07:09	08/26/18 01:54	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 01:54	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 01:54	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 07:09	08/26/18 01:54	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 07:09	08/26/18 01:54	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 01:54	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/26/18 01:54	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 01:54	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 01:54	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 01:54	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 01:54	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 01:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 07:09*	*08/26/18 01:54*	*1*

Client Sample ID: OB-22-082118

Date Collected: 08/21/18 13:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-10

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	84		30 - 130	08/25/18 07:09	08/26/18 01:54	1
Phenol-d5 (Surr)	14	X	15 - 110	08/25/18 07:09	08/26/18 01:54	1
Terphenyl-d14 (Surr)	110		30 - 130	08/25/18 07:09	08/26/18 01:54	1
2,4,6-Tribromophenol (Surr)	88		15 - 110	08/25/18 07:09	08/26/18 01:54	1
2-Fluorophenol (Surr)	39		15 - 110	08/25/18 07:09	08/26/18 01:54	1
2-Fluorobiphenyl	83		30 - 130	08/25/18 07:09	08/26/18 01:54	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 02:38	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 02:38	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 02:38	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 02:38	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 02:38	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 02:38	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 02:38	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 02:38	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 02:38	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 02:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	58		30 - 150	08/24/18 18:58	08/26/18 02:38	1
Tetrachloro-m-xylene	59		30 - 150	08/24/18 18:58	08/26/18 02:38	1
DCB Decachlorobiphenyl	66		30 - 150	08/24/18 18:58	08/26/18 02:38	1
DCB Decachlorobiphenyl	70		30 - 150	08/24/18 18:58	08/26/18 02:38	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**16.9**		0.60	0.33	mg/L			08/26/18 13:19	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38.5**	**D**	1.20	0.78	mg/L			08/27/18 08:07	10

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 09:26	08/28/18 16:27	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 09:26	08/28/18 16:27	2
Barium	**13.5**		4.0	1.1	ug/L		08/28/18 09:26	08/28/18 16:27	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 09:26	08/28/18 16:27	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 09:26	08/28/18 16:27	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:27	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:27	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 09:26	08/28/18 16:27	2
Manganese	**4.7**	**J**	8.0	2.7	ug/L		08/28/18 09:26	08/28/18 16:27	2
Nickel	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:27	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 09:26	08/28/18 16:27	2
Antimony	**1.4**	**J B**	2.0	0.62	ug/L		08/28/18 09:26	08/28/18 16:27	2
Selenium	**0.92**	**J**	10.0	0.69	ug/L		08/28/18 09:26	08/28/18 16:27	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 09:26	08/28/18 16:27	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 09:26	08/28/18 16:27	2

Client Sample ID: OB-22-082118
Date Collected: 08/21/18 13:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-10
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**165**		40.0	15.0	ug/L		08/28/18 09:26	08/28/18 16:27	2
Sodium	**23700**		200	75.7	ug/L		08/28/18 09:26	08/28/18 16:27	2
Magnesium	**6550**		200	65.7	ug/L		08/28/18 09:26	08/28/18 16:27	2
Potassium	**1050**		200	64.9	ug/L		08/28/18 09:26	08/28/18 16:27	2
Calcium	**31500**		200	67.6	ug/L		08/28/18 09:26	08/28/18 16:27	2
Iron	**226**		120	45.7	ug/L		08/28/18 09:26	08/28/18 16:27	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 09:26	08/28/18 16:27	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/30/18 02:03	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/30/18 02:03	2
Barium	**10.6**		4.0	1.1	ug/L		08/25/18 00:02	08/30/18 02:03	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/30/18 02:03	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/30/18 02:03	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:03	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:03	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/30/18 02:03	2
Manganese	2.7	U	8.0	2.7	ug/L		08/25/18 00:02	08/30/18 02:03	2
Nickel	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:03	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/30/18 02:03	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/30/18 02:03	2
Selenium	**0.87**	**J**	10.0	0.69	ug/L		08/25/18 00:02	08/30/18 02:03	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/30/18 02:03	2
Zinc	5.4	U	16.0	5.4	ug/L		08/25/18 00:02	08/30/18 02:03	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/30/18 02:03	2
Sodium	**18200**		200	75.7	ug/L		08/25/18 00:02	08/30/18 02:03	2
Magnesium	**4800**		200	65.7	ug/L		08/25/18 00:02	08/30/18 02:03	2
Potassium	**863**		200	64.9	ug/L		08/25/18 00:02	08/30/18 02:03	2
Calcium	**27200**		200	67.6	ug/L		08/25/18 00:02	08/30/18 02:03	2
Iron	45.7	U	120	45.7	ug/L		08/25/18 00:02	08/30/18 02:03	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/30/18 02:03	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:06	08/24/18 14:21	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:30	1
Bicarbonate Alkalinity as CaCO3	**77.9**		5.0	5.0	mg/L			08/24/18 11:50	1
Alkalinity	**77.9**		5.0	5.0	mg/L			08/24/18 11:50	1

Client Sample ID: RW-16-082118
Date Collected: 08/21/18 16:45
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 15:59	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 15:59	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*70 - 130*		*08/24/18 15:59*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 00:57	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 00:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 00:57	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 00:57	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 00:57	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 00:57	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 00:57	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 00:57	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 00:57	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 00:57	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 00:57	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 00:57	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 00:57	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 00:57	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 00:57	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 00:57	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 00:57	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 00:57	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 00:57	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 00:57	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/27/18 00:57	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 00:57	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 00:57	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 00:57	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 00:57	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 00:57	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 00:57	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 00:57	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 00:57	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 00:57	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 00:57	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 00:57	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 00:57	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 00:57	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 00:57	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/27/18 00:57	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 00:57	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 00:57	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 00:57	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 00:57	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 00:57	1

Client Sample ID: RW-16-082118
Date Collected: 08/21/18 16:45
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 00:57	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 00:57	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 00:57	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 00:57	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 00:57	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 00:57	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 00:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 00:57*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/27/18 00:57*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*08/27/18 00:57*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*08/27/18 00:57*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*08/27/18 00:57*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/24/18 09:07	08/24/18 18:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*10 - 150*	*08/24/18 09:07*	*08/24/18 18:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 07:09	08/26/18 19:22	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 07:09	08/26/18 19:22	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 07:09	08/26/18 19:22	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 07:09	08/26/18 19:22	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/25/18 07:09	08/26/18 19:22	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 07:09	08/26/18 19:22	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 07:09	08/26/18 19:22	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 07:09	08/26/18 19:22	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/25/18 07:09	08/26/18 19:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 07:09	08/26/18 02:15	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 07:09	08/26/18 02:15	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 07:09	08/26/18 02:15	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 02:15	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 02:15	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 02:15	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 07:09	08/26/18 02:15	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 02:15	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 07:09	08/26/18 02:15	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 07:09	08/26/18 02:15	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 07:09	08/26/18 02:15	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 07:09	08/26/18 02:15	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 07:09	08/26/18 02:15	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: RW-16-082118
Date Collected: 08/21/18 16:45
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 07:09	08/26/18 02:15	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 07:09	08/26/18 02:15	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 07:09	08/26/18 02:15	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 07:09	08/26/18 02:15	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 02:15	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 07:09	08/26/18 02:15	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 07:09	08/26/18 02:15	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 02:15	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 07:09	08/26/18 02:15	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 02:15	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 07:09	08/26/18 02:15	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 07:09	08/26/18 02:15	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 07:09	08/26/18 02:15	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 07:09	08/26/18 02:15	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 07:09	08/26/18 02:15	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 02:15	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 02:15	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 07:09	08/26/18 02:15	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 07:09	08/26/18 02:15	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 07:09	08/26/18 02:15	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 07:09	08/26/18 02:15	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 07:09	08/26/18 02:15	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 07:09	08/26/18 02:15	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 02:15	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 02:15	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 02:15	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 02:15	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 02:15	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 02:15	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 07:09	08/26/18 02:15	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 07:09	08/26/18 02:15	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 07:09	08/26/18 02:15	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 07:09	08/26/18 02:15	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 07:09	08/26/18 02:15	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 07:09	08/26/18 02:15	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 02:15	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 02:15	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 07:09	08/26/18 02:15	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 07:09	08/26/18 02:15	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 02:15	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/26/18 02:15	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 02:15	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 02:15	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 02:15	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 02:15	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 02:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 07:09*	*08/26/18 02:15*	*1*

Client Sample ID: RW-16-082118

Date Collected: 08/21/18 16:45
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-11

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*79*		*30 - 130*	*08/25/18 07:09*	*08/26/18 02:15*	*1*
Phenol-d5 (Surr)	*13*	*X*	*15 - 110*	*08/25/18 07:09*	*08/26/18 02:15*	*1*
Terphenyl-d14 (Surr)	*95*		*30 - 130*	*08/25/18 07:09*	*08/26/18 02:15*	*1*
2,4,6-Tribromophenol (Surr)	*86*		*15 - 110*	*08/25/18 07:09*	*08/26/18 02:15*	*1*
2-Fluorophenol (Surr)	*36*		*15 - 110*	*08/25/18 07:09*	*08/26/18 02:15*	*1*
2-Fluorobiphenyl	*78*		*30 - 130*	*08/25/18 07:09*	*08/26/18 02:15*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 03:01	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 03:01	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 03:01	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 03:01	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 03:01	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 03:01	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 03:01	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 03:01	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 03:01	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 03:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*56*		*30 - 150*	*08/24/18 18:58*	*08/26/18 03:01*	*1*
Tetrachloro-m-xylene	*58*		*30 - 150*	*08/24/18 18:58*	*08/26/18 03:01*	*1*
DCB Decachlorobiphenyl	*64*		*30 - 150*	*08/24/18 18:58*	*08/26/18 03:01*	*1*
DCB Decachlorobiphenyl	*68*		*30 - 150*	*08/24/18 18:58*	*08/26/18 03:01*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**12.9**		0.60	0.33	mg/L			08/26/18 13:30	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**51.4**	**D**	2.40	1.56	mg/L			08/27/18 08:20	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 09:26	08/28/18 16:29	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 09:26	08/28/18 16:29	2
Barium	**39.3**		4.0	1.1	ug/L		08/28/18 09:26	08/28/18 16:29	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 09:26	08/28/18 16:29	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 09:26	08/28/18 16:29	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:29	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:29	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 09:26	08/28/18 16:29	2
Manganese	2.7	U	8.0	2.7	ug/L		08/28/18 09:26	08/28/18 16:29	2
Nickel	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:29	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 09:26	08/28/18 16:29	2
Antimony	**0.86**	**J B**	2.0	0.62	ug/L		08/28/18 09:26	08/28/18 16:29	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 09:26	08/28/18 16:29	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 09:26	08/28/18 16:29	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 09:26	08/28/18 16:29	2

Client Sample ID: RW-16-082118

Date Collected: 08/21/18 16:45
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-11

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15.0	U	40.0	15.0	ug/L		08/28/18 09:26	08/28/18 16:29	2
Sodium	**20300**		200	75.7	ug/L		08/28/18 09:26	08/28/18 16:29	2
Magnesium	**22000**		200	65.7	ug/L		08/28/18 09:26	08/28/18 16:29	2
Potassium	**2110**		200	64.9	ug/L		08/28/18 09:26	08/28/18 16:29	2
Calcium	**66700**		200	67.6	ug/L		08/28/18 09:26	08/28/18 16:29	2
Iron	**117**	**J**	120	45.7	ug/L		08/28/18 09:26	08/28/18 16:29	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 09:26	08/28/18 16:29	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/30/18 02:30	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/30/18 02:30	2
Barium	**30.2**		4.0	1.1	ug/L		08/25/18 00:02	08/30/18 02:30	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/30/18 02:30	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/30/18 02:30	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:30	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:30	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/30/18 02:30	2
Manganese	2.7	U	8.0	2.7	ug/L		08/25/18 00:02	08/30/18 02:30	2
Nickel	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:30	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/30/18 02:30	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/30/18 02:30	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/30/18 02:30	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/30/18 02:30	2
Zinc	5.4	U	16.0	5.4	ug/L		08/25/18 00:02	08/30/18 02:30	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/30/18 02:30	2
Sodium	**15000**		200	75.7	ug/L		08/25/18 00:02	08/30/18 02:30	2
Magnesium	**16500**		200	65.7	ug/L		08/25/18 00:02	08/30/18 02:30	2
Potassium	**1700**		200	64.9	ug/L		08/25/18 00:02	08/30/18 02:30	2
Calcium	**55200**		200	67.6	ug/L		08/25/18 00:02	08/30/18 02:30	2
Iron	45.7	U	120	45.7	ug/L		08/25/18 00:02	08/30/18 02:30	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/30/18 02:30	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:06	08/24/18 13:48	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:31	1
Bicarbonate Alkalinity as CaCO3	**207**		5.0	5.0	mg/L			08/24/18 11:58	1
Alkalinity	**207**		5.0	5.0	mg/L			08/24/18 11:58	1

Client Sample ID: OB-14A-082118
Date Collected: 08/21/18 14:45
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 16:23	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 16:23	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*70 - 130*		*08/24/18 16:23*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 01:19	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 01:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 01:19	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 01:19	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 01:19	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 01:19	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 01:19	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 01:19	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 01:19	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 01:19	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 01:19	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 01:19	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 01:19	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 01:19	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 01:19	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 01:19	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 01:19	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 01:19	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 01:19	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 01:19	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/27/18 01:19	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 01:19	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 01:19	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 01:19	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 01:19	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 01:19	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 01:19	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 01:19	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 01:19	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 01:19	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 01:19	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 01:19	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 01:19	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 01:19	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 01:19	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/27/18 01:19	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 01:19	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 01:19	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 01:19	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 01:19	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 01:19	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-14A-082118
Date Collected: 08/21/18 14:45
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 01:19	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 01:19	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 01:19	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 01:19	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 01:19	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 01:19	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 01:19	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 01:19*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/27/18 01:19*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*08/27/18 01:19*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*08/27/18 01:19*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/27/18 01:19*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/24/18 09:07	08/24/18 18:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/24/18 09:07*	*08/24/18 18:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 07:09	08/26/18 19:43	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 07:09	08/26/18 19:43	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 07:09	08/26/18 19:43	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 07:09	08/26/18 19:43	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/25/18 07:09	08/26/18 19:43	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 07:09	08/26/18 19:43	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 07:09	08/26/18 19:43	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 07:09	08/26/18 19:43	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/25/18 07:09	08/26/18 19:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 07:09	08/26/18 02:36	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 07:09	08/26/18 02:36	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 07:09	08/26/18 02:36	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 02:36	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 02:36	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 02:36	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 07:09	08/26/18 02:36	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 02:36	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 07:09	08/26/18 02:36	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 07:09	08/26/18 02:36	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 07:09	08/26/18 02:36	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 07:09	08/26/18 02:36	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 07:09	08/26/18 02:36	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-14A-082118
Date Collected: 08/21/18 14:45
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 07:09	08/26/18 02:36	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 07:09	08/26/18 02:36	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 07:09	08/26/18 02:36	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 07:09	08/26/18 02:36	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 02:36	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 07:09	08/26/18 02:36	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 07:09	08/26/18 02:36	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 02:36	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 07:09	08/26/18 02:36	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 02:36	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 07:09	08/26/18 02:36	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 07:09	08/26/18 02:36	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 07:09	08/26/18 02:36	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 07:09	08/26/18 02:36	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 07:09	08/26/18 02:36	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 02:36	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/26/18 02:36	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 07:09	08/26/18 02:36	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 07:09	08/26/18 02:36	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 07:09	08/26/18 02:36	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 07:09	08/26/18 02:36	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 07:09	08/26/18 02:36	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 07:09	08/26/18 02:36	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 02:36	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/26/18 02:36	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 02:36	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 02:36	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 02:36	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/26/18 02:36	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 07:09	08/26/18 02:36	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 07:09	08/26/18 02:36	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 07:09	08/26/18 02:36	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 07:09	08/26/18 02:36	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 07:09	08/26/18 02:36	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 07:09	08/26/18 02:36	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 02:36	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 02:36	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 07:09	08/26/18 02:36	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 07:09	08/26/18 02:36	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/26/18 02:36	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/26/18 02:36	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/26/18 02:36	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/26/18 02:36	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/26/18 02:36	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/26/18 02:36	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/26/18 02:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclohexanamine, N-cyclohexyl-	*12*	*J N*	*ug/L*		*7.13*	*101-83-7*	*08/25/18 07:09*	*08/26/18 02:36*	*1*

Client Sample ID: OB-14A-082118

Date Collected: 08/21/18 14:45
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-12

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	90		30 - 130	08/25/18 07:09	08/26/18 02:36	1
Phenol-d5 (Surr)	19		15 - 110	08/25/18 07:09	08/26/18 02:36	1
Terphenyl-d14 (Surr)	97		30 - 130	08/25/18 07:09	08/26/18 02:36	1
2,4,6-Tribromophenol (Surr)	103		15 - 110	08/25/18 07:09	08/26/18 02:36	1
2-Fluorophenol (Surr)	43		15 - 110	08/25/18 07:09	08/26/18 02:36	1
2-Fluorobiphenyl	92		30 - 130	08/25/18 07:09	08/26/18 02:36	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/26/18 03:25	1
PCB-1016	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/26/18 03:25	1
PCB-1221	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/26/18 03:25	1
PCB-1232	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/26/18 03:25	1
PCB-1242	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/26/18 03:25	1
PCB-1248	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/26/18 03:25	1
PCB-1254	0.11	U	0.41	0.11	ug/L		08/24/18 18:58	08/26/18 03:25	1
PCB-1260	0.11	U	0.41	0.11	ug/L		08/24/18 18:58	08/26/18 03:25	1
PCB-1262	0.11	U	0.41	0.11	ug/L		08/24/18 18:58	08/26/18 03:25	1
PCB-1268	0.11	U	0.41	0.11	ug/L		08/24/18 18:58	08/26/18 03:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	60		30 - 150	08/24/18 18:58	08/26/18 03:25	1
Tetrachloro-m-xylene	59		30 - 150	08/24/18 18:58	08/26/18 03:25	1
DCB Decachlorobiphenyl	69		30 - 150	08/24/18 18:58	08/26/18 03:25	1
DCB Decachlorobiphenyl	70		30 - 150	08/24/18 18:58	08/26/18 03:25	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**0.70**		0.60	0.33	mg/L			08/26/18 13:42	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.0**	**D**	1.20	0.78	mg/L			08/27/18 08:34	10

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 09:26	08/28/18 16:32	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 09:26	08/28/18 16:32	2
Barium	**418**		4.0	1.1	ug/L		08/28/18 09:26	08/28/18 16:32	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 09:26	08/28/18 16:32	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 09:26	08/28/18 16:32	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:32	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:32	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 09:26	08/28/18 16:32	2
Manganese	**1880**		8.0	2.7	ug/L		08/28/18 09:26	08/28/18 16:32	2
Nickel	**3.0**	**J**	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:32	2
Lead	**3.1**		1.2	0.37	ug/L		08/28/18 09:26	08/28/18 16:32	2
Antimony	**1.2**	**J B**	2.0	0.62	ug/L		08/28/18 09:26	08/28/18 16:32	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 09:26	08/28/18 16:32	2
Vanadium	**1.7**	**J**	4.0	1.2	ug/L		08/28/18 09:26	08/28/18 16:32	2
Zinc	**21.0**		16.0	5.4	ug/L		08/28/18 09:26	08/28/18 16:32	2

Client Sample ID: OB-14A-082118

Date Collected: 08/21/18 14:45
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-12

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**56.3**		40.0	15.0	ug/L		08/28/18 09:26	08/28/18 16:32	2
Sodium	**17600**		200	75.7	ug/L		08/28/18 09:26	08/28/18 16:32	2
Magnesium	**10300**		200	65.7	ug/L		08/28/18 09:26	08/28/18 16:32	2
Potassium	**5120**		200	64.9	ug/L		08/28/18 09:26	08/28/18 16:32	2
Calcium	**105000**		200	67.6	ug/L		08/28/18 09:26	08/28/18 16:32	2
Iron	**48500**		120	45.7	ug/L		08/28/18 09:26	08/28/18 16:32	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 09:26	08/28/18 16:32	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/25/18 05:03	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/25/18 05:03	2
Barium	**285**		4.0	1.1	ug/L		08/25/18 00:02	08/25/18 05:03	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/25/18 05:03	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/25/18 05:03	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 05:03	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 05:03	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/27/18 22:00	2
Manganese	**1540**		8.0	2.7	ug/L		08/25/18 00:02	08/25/18 05:03	2
Nickel	**1.8**	**J**	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 05:03	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/25/18 05:03	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/25/18 05:03	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/25/18 05:03	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/25/18 05:03	2
Zinc	**10.6**	**J**	16.0	5.4	ug/L		08/25/18 00:02	08/25/18 05:03	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/25/18 05:03	2
Sodium	**14600**		200	75.7	ug/L		08/25/18 00:02	08/25/18 05:03	2
Magnesium	**8300**		200	65.7	ug/L		08/25/18 00:02	08/25/18 05:03	2
Potassium	**4560**		200	64.9	ug/L		08/25/18 00:02	08/25/18 05:03	2
Calcium	**95300**		200	67.6	ug/L		08/25/18 00:02	08/25/18 05:03	2
Iron	**9430**		120	45.7	ug/L		08/25/18 00:02	08/25/18 05:03	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/25/18 05:03	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:06	08/24/18 14:26	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:33	1
Bicarbonate Alkalinity as CaCO3	**337**		5.0	5.0	mg/L			08/24/18 12:05	1
Alkalinity	**337**		5.0	5.0	mg/L			08/24/18 12:05	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-14B-082118
Date Collected: 08/21/18 15:50
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 16:46	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 16:46	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*70 - 130*		*08/24/18 16:46*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 01:41	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 01:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 01:41	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 01:41	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 01:41	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 01:41	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 01:41	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 01:41	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 01:41	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 01:41	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 01:41	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 01:41	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 01:41	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 01:41	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 01:41	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 01:41	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 01:41	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 01:41	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 01:41	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 01:41	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/27/18 01:41	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 01:41	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 01:41	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 01:41	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 01:41	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 01:41	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 01:41	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 01:41	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 01:41	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 01:41	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 01:41	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 01:41	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 01:41	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 01:41	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 01:41	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/27/18 01:41	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 01:41	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 01:41	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 01:41	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 01:41	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 01:41	1

Client Sample ID: OB-14B-082118
Date Collected: 08/21/18 15:50
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 01:41	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 01:41	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 01:41	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 01:41	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 01:41	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 01:41	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 01:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 01:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/27/18 01:41*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*08/27/18 01:41*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*08/27/18 01:41*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/27/18 01:41*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.33**		0.20	0.016	ug/L		08/24/18 09:07	08/24/18 19:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*10 - 150*	*08/24/18 09:07*	*08/24/18 19:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:11	08/26/18 02:51	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:11	08/26/18 02:51	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:11	08/26/18 02:51	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:11	08/26/18 02:51	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:11	08/26/18 02:51	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/25/18 10:11	08/26/18 02:51	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:11	08/26/18 02:51	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:11	08/26/18 02:51	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:11	08/26/18 02:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:11	08/26/18 03:28	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:11	08/26/18 03:28	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:11	08/26/18 03:28	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 03:28	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 03:28	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 03:28	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:11	08/26/18 03:28	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:11	08/26/18 03:28	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:11	08/26/18 03:28	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:11	08/26/18 03:28	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:11	08/26/18 03:28	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:11	08/26/18 03:28	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:11	08/26/18 03:28	1

Client Sample ID: OB-14B-082118
Date Collected: 08/21/18 15:50
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:11	08/26/18 03:28	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:11	08/26/18 03:28	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:11	08/26/18 03:28	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:11	08/26/18 03:28	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 03:28	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:11	08/26/18 03:28	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:11	08/26/18 03:28	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 03:28	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:11	08/26/18 03:28	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 03:28	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:11	08/26/18 03:28	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:11	08/26/18 03:28	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:11	08/26/18 03:28	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:11	08/26/18 03:28	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:11	08/26/18 03:28	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 03:28	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 03:28	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:11	08/26/18 03:28	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:11	08/26/18 03:28	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:11	08/26/18 03:28	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:11	08/26/18 03:28	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:11	08/26/18 03:28	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:11	08/26/18 03:28	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 03:28	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:11	08/26/18 03:28	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:11	08/26/18 03:28	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:11	08/26/18 03:28	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:11	08/26/18 03:28	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:11	08/26/18 03:28	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:11	08/26/18 03:28	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:11	08/26/18 03:28	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:11	08/26/18 03:28	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:11	08/26/18 03:28	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:11	08/26/18 03:28	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:11	08/26/18 03:28	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:11	08/26/18 03:28	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 03:28	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:11	08/26/18 03:28	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 10:11	08/26/18 03:28	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:11	08/26/18 03:28	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 10:11	08/26/18 03:28	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:11	08/26/18 03:28	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 03:28	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 03:28	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:11	08/26/18 03:28	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 03:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:11*	*08/26/18 03:28*	*1*

Client Sample ID: OB-14B-082118

Date Collected: 08/21/18 15:50
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-13

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	104		30 - 130	08/25/18 10:11	08/26/18 03:28	1
Phenol-d5 (Surr)	28		15 - 110	08/25/18 10:11	08/26/18 03:28	1
Terphenyl-d14 (Surr)	96		30 - 130	08/25/18 10:11	08/26/18 03:28	1
2,4,6-Tribromophenol (Surr)	118	X	15 - 110	08/25/18 10:11	08/26/18 03:28	1
2-Fluorophenol (Surr)	44		15 - 110	08/25/18 10:11	08/26/18 03:28	1
2-Fluorobiphenyl	99		30 - 130	08/25/18 10:11	08/26/18 03:28	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/26/18 03:48	1
PCB-1016	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/26/18 03:48	1
PCB-1221	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/26/18 03:48	1
PCB-1232	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/26/18 03:48	1
PCB-1242	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/26/18 03:48	1
PCB-1248	0.12	U	0.41	0.12	ug/L		08/24/18 18:58	08/26/18 03:48	1
PCB-1254	0.11	U	0.41	0.11	ug/L		08/24/18 18:58	08/26/18 03:48	1
PCB-1260	0.11	U	0.41	0.11	ug/L		08/24/18 18:58	08/26/18 03:48	1
PCB-1262	0.11	U	0.41	0.11	ug/L		08/24/18 18:58	08/26/18 03:48	1
PCB-1268	0.11	U	0.41	0.11	ug/L		08/24/18 18:58	08/26/18 03:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	55		30 - 150	08/24/18 18:58	08/26/18 03:48	1
Tetrachloro-m-xylene	62		30 - 150	08/24/18 18:58	08/26/18 03:48	1
DCB Decachlorobiphenyl	63		30 - 150	08/24/18 18:58	08/26/18 03:48	1
DCB Decachlorobiphenyl	73		30 - 150	08/24/18 18:58	08/26/18 03:48	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**13.2**		0.60	0.33	mg/L			08/26/18 13:53	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**49.1**	**D**	2.40	1.56	mg/L			08/27/18 08:47	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 09:26	08/28/18 16:35	2
Arsenic	**1.2**	**J**	2.0	0.77	ug/L		08/28/18 09:26	08/28/18 16:35	2
Barium	**45.6**		4.0	1.1	ug/L		08/28/18 09:26	08/28/18 16:35	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 09:26	08/28/18 16:35	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 09:26	08/28/18 16:35	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:35	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:35	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 09:26	08/28/18 16:35	2
Manganese	**1980**		8.0	2.7	ug/L		08/28/18 09:26	08/28/18 16:35	2
Nickel	**1.4**	**J**	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:35	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 09:26	08/28/18 16:35	2
Antimony	**0.86**	**J B**	2.0	0.62	ug/L		08/28/18 09:26	08/28/18 16:35	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 09:26	08/28/18 16:35	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 09:26	08/28/18 16:35	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 09:26	08/28/18 16:35	2

Client Sample ID: OB-14B-082118

Date Collected: 08/21/18 15:50
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-13

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**42.6**		40.0	15.0	ug/L		08/28/18 09:26	08/28/18 16:35	2
Sodium	**22300**		200	75.7	ug/L		08/28/18 09:26	08/28/18 16:35	2
Magnesium	**29000**		200	65.7	ug/L		08/28/18 09:26	08/28/18 16:35	2
Potassium	**3220**		200	64.9	ug/L		08/28/18 09:26	08/28/18 16:35	2
Calcium	**104000**		200	67.6	ug/L		08/28/18 09:26	08/28/18 16:35	2
Iron	**944**		120	45.7	ug/L		08/28/18 09:26	08/28/18 16:35	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 09:26	08/28/18 16:35	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/30/18 02:41	2
Arsenic	**0.80**	**J**	2.0	0.77	ug/L		08/25/18 00:02	08/30/18 02:41	2
Barium	**38.4**		4.0	1.1	ug/L		08/25/18 00:02	08/30/18 02:41	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/30/18 02:41	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/30/18 02:41	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:41	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:41	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/30/18 02:41	2
Manganese	**1620**		8.0	2.7	ug/L		08/25/18 00:02	08/30/18 02:41	2
Nickel	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:41	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/30/18 02:41	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/30/18 02:41	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/30/18 02:41	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/30/18 02:41	2
Zinc	5.4	U	16.0	5.4	ug/L		08/25/18 00:02	08/30/18 02:41	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/30/18 02:41	2
Sodium	**17200**		200	75.7	ug/L		08/25/18 00:02	08/30/18 02:41	2
Magnesium	**22300**		200	65.7	ug/L		08/25/18 00:02	08/30/18 02:41	2
Potassium	**2780**		200	64.9	ug/L		08/25/18 00:02	08/30/18 02:41	2
Calcium	**91500**		200	67.6	ug/L		08/25/18 00:02	08/30/18 02:41	2
Iron	45.7	U	120	45.7	ug/L		08/25/18 00:02	08/30/18 02:41	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/30/18 02:41	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:06	08/24/18 14:27	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:38	1
Bicarbonate Alkalinity as CaCO3	**337**		5.0	5.0	mg/L			08/24/18 12:15	1
Alkalinity	**337**		5.0	5.0	mg/L			08/24/18 12:15	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: FB-01-082118
Date Collected: 08/21/18 10:40
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 10:09	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 10:09	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 10:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*70 - 130*		*08/24/18 10:09*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 00:35	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 00:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 00:35	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 00:35	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 00:35	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 00:35	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 00:35	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 00:35	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 00:35	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 00:35	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 00:35	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 00:35	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 00:35	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 00:35	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 00:35	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 00:35	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 00:35	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 00:35	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 00:35	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 00:35	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/27/18 00:35	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 00:35	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 00:35	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 00:35	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 00:35	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 00:35	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 00:35	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 00:35	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 00:35	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 00:35	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 00:35	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 00:35	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 00:35	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 00:35	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 00:35	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/27/18 00:35	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 00:35	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 00:35	1
Methylene Chloride	**4.3**		1.0	0.32	ug/L			08/27/18 00:35	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 00:35	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 00:35	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: FB-01-082118
Date Collected: 08/21/18 10:40
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 00:35	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 00:35	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 00:35	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 00:35	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 00:35	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 00:35	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 00:35	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 00:35*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/27/18 00:35*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*08/27/18 00:35*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/27/18 00:35*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/27/18 00:35*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/24/18 09:07	08/24/18 19:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*10 - 150*	*08/24/18 09:07*	*08/24/18 19:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:11	08/26/18 03:12	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:11	08/26/18 03:12	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:11	08/26/18 03:12	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:11	08/26/18 03:12	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:11	08/26/18 03:12	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/25/18 10:11	08/26/18 03:12	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:11	08/26/18 03:12	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:11	08/26/18 03:12	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:11	08/26/18 03:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:11	08/26/18 03:49	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:11	08/26/18 03:49	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:11	08/26/18 03:49	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 03:49	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 03:49	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 03:49	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:11	08/26/18 03:49	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:11	08/26/18 03:49	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:11	08/26/18 03:49	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:11	08/26/18 03:49	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:11	08/26/18 03:49	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:11	08/26/18 03:49	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:11	08/26/18 03:49	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: FB-01-082118
Date Collected: 08/21/18 10:40
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:11	08/26/18 03:49	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:11	08/26/18 03:49	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:11	08/26/18 03:49	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:11	08/26/18 03:49	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 03:49	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:11	08/26/18 03:49	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:11	08/26/18 03:49	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 03:49	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:11	08/26/18 03:49	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 03:49	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:11	08/26/18 03:49	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:11	08/26/18 03:49	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:11	08/26/18 03:49	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:11	08/26/18 03:49	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:11	08/26/18 03:49	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 03:49	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 03:49	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:11	08/26/18 03:49	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:11	08/26/18 03:49	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:11	08/26/18 03:49	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:11	08/26/18 03:49	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:11	08/26/18 03:49	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:11	08/26/18 03:49	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 03:49	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:11	08/26/18 03:49	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:11	08/26/18 03:49	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:11	08/26/18 03:49	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:11	08/26/18 03:49	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:11	08/26/18 03:49	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:11	08/26/18 03:49	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:11	08/26/18 03:49	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:11	08/26/18 03:49	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:11	08/26/18 03:49	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:11	08/26/18 03:49	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:11	08/26/18 03:49	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:11	08/26/18 03:49	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 03:49	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:11	08/26/18 03:49	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 10:11	08/26/18 03:49	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:11	08/26/18 03:49	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 10:11	08/26/18 03:49	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:11	08/26/18 03:49	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 03:49	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 03:49	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:11	08/26/18 03:49	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 03:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:11*	*08/26/18 03:49*	*1*

Client Sample ID: FB-01-082118
Date Collected: 08/21/18 10:40
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-14
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*107*		*30 - 130*	*08/25/18 10:11*	*08/26/18 03:49*	*1*
Phenol-d5 (Surr)	*29*		*15 - 110*	*08/25/18 10:11*	*08/26/18 03:49*	*1*
Terphenyl-d14 (Surr)	*100*		*30 - 130*	*08/25/18 10:11*	*08/26/18 03:49*	*1*
2,4,6-Tribromophenol (Surr)	*113*	*X*	*15 - 110*	*08/25/18 10:11*	*08/26/18 03:49*	*1*
2-Fluorophenol (Surr)	*45*		*15 - 110*	*08/25/18 10:11*	*08/26/18 03:49*	*1*
2-Fluorobiphenyl	*101*		*30 - 130*	*08/25/18 10:11*	*08/26/18 03:49*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:11	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:11	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:11	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:11	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:11	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:11	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 04:11	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 04:11	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 04:11	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 04:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*61*		*30 - 150*	*08/24/18 18:58*	*08/26/18 04:11*	*1*
Tetrachloro-m-xylene	*61*		*30 - 150*	*08/24/18 18:58*	*08/26/18 04:11*	*1*
DCB Decachlorobiphenyl	*70*		*30 - 150*	*08/24/18 18:58*	*08/26/18 04:11*	*1*
DCB Decachlorobiphenyl	*72*		*30 - 150*	*08/24/18 18:58*	*08/26/18 04:11*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/26/18 14:27	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/26/18 14:27	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 09:26	08/28/18 16:37	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 09:26	08/28/18 16:37	2
Barium	1.1	U	4.0	1.1	ug/L		08/28/18 09:26	08/28/18 16:37	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 09:26	08/28/18 16:37	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 09:26	08/28/18 16:37	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:37	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:37	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 09:26	08/28/18 16:37	2
Manganese	2.7	U	8.0	2.7	ug/L		08/28/18 09:26	08/28/18 16:37	2
Nickel	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:37	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 09:26	08/28/18 16:37	2
Antimony	0.62	U	2.0	0.62	ug/L		08/28/18 09:26	08/28/18 16:37	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 09:26	08/28/18 16:37	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 09:26	08/28/18 16:37	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 09:26	08/28/18 16:37	2
Aluminum	**18.3**	**J**	40.0	15.0	ug/L		08/28/18 09:26	08/28/18 16:37	2
Sodium	**2050**		200	75.7	ug/L		08/28/18 09:26	08/28/18 16:37	2
Magnesium	65.7	U	200	65.7	ug/L		08/28/18 09:26	08/28/18 16:37	2

Client Sample ID: FB-01-082118
Lab Sample ID: 460-163149-14
Date Collected: 08/21/18 10:40
Matrix: Water
Date Received: 08/22/18 16:45

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	64.9	U	200	64.9	ug/L		08/28/18 09:26	08/28/18 16:37	2
Calcium	67.6	U	200	67.6	ug/L		08/28/18 09:26	08/28/18 16:37	2
Iron	45.7	U	120	45.7	ug/L		08/28/18 09:26	08/28/18 16:37	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 09:26	08/28/18 16:37	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/25/18 05:17	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/25/18 05:17	2
Barium	1.1	U	4.0	1.1	ug/L		08/25/18 00:02	08/25/18 05:17	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/25/18 05:17	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/25/18 05:17	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 05:17	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 05:17	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/27/18 22:10	2
Manganese	2.7	U	8.0	2.7	ug/L		08/25/18 00:02	08/25/18 05:17	2
Nickel	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 05:17	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/25/18 05:17	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/25/18 05:17	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/25/18 05:17	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/25/18 05:17	2
Zinc	5.4	U	16.0	5.4	ug/L		08/25/18 00:02	08/25/18 05:17	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/25/18 05:17	2
Sodium	**113**	**J**	200	75.7	ug/L		08/25/18 00:02	08/25/18 05:17	2
Magnesium	65.7	U	200	65.7	ug/L		08/25/18 00:02	08/25/18 05:17	2
Potassium	64.9	U	200	64.9	ug/L		08/25/18 00:02	08/25/18 05:17	2
Calcium	67.6	U	200	67.6	ug/L		08/25/18 00:02	08/25/18 05:17	2
Iron	45.7	U	120	45.7	ug/L		08/25/18 00:02	08/25/18 05:17	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/25/18 05:17	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:06	08/24/18 14:29	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:38	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/24/18 13:01	1
Alkalinity	5.0	U	5.0	5.0	mg/L			08/24/18 13:01	1

Client Sample ID: TB-01-082218
Lab Sample ID: 460-163149-15
Date Collected: 08/22/18 00:00
Matrix: Water
Date Received: 08/22/18 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 10:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: TB-01-082218
Date Collected: 08/22/18 00:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 10:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*70 - 130*		*08/24/18 10:33*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 22:21	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 22:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 22:21	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 22:21	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 22:21	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 22:21	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 22:21	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 22:21	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 22:21	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 22:21	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 22:21	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 22:21	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 22:21	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 22:21	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 22:21	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 22:21	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 22:21	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 22:21	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 22:21	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 22:21	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 22:21	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 22:21	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 22:21	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 22:21	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 22:21	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 22:21	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 22:21	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 22:21	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 22:21	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 22:21	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 22:21	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 22:21	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 22:21	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 22:21	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 22:21	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/26/18 22:21	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 22:21	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 22:21	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/26/18 22:21	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 22:21	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 22:21	1
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 22:21	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 22:21	1

Client Sample ID: TB-01-082218

Lab Sample ID: 460-163149-15

Date Collected: 08/22/18 00:00

Matrix: Water

Date Received: 08/22/18 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 22:21	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 22:21	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 22:21	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 22:21	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 22:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 22:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*08/26/18 22:21*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*08/26/18 22:21*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/26/18 22:21*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*08/26/18 22:21*	*1*

Client Sample ID: OB-23-082118

Lab Sample ID: 460-163149-16

Date Collected: 08/21/18 14:55

Matrix: Water

Date Received: 08/22/18 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 17:09	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 17:09	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*70 - 130*		*08/24/18 17:09*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 02:03	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 02:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 02:03	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 02:03	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 02:03	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 02:03	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 02:03	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 02:03	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 02:03	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 02:03	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 02:03	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 02:03	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 02:03	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 02:03	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 02:03	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 02:03	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 02:03	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 02:03	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 02:03	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 02:03	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/27/18 02:03	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-23-082118
Date Collected: 08/21/18 14:55
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 02:03	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 02:03	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 02:03	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 02:03	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 02:03	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 02:03	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 02:03	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 02:03	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 02:03	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 02:03	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 02:03	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 02:03	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 02:03	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 02:03	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/27/18 02:03	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 02:03	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 02:03	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 02:03	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 02:03	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 02:03	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 02:03	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 02:03	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 02:03	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 02:03	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 02:03	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 02:03	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 02:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Indane	*6.3*	*J N*	*ug/L*		*11.60*	*496-11-7*		*08/27/18 02:03*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/27/18 02:03*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*08/27/18 02:03*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*08/27/18 02:03*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/27/18 02:03*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.017	U	0.22	0.017	ug/L		08/24/18 09:07	08/24/18 19:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*10 - 150*	*08/24/18 09:07*	*08/24/18 19:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:11	08/26/18 03:33	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:11	08/26/18 03:33	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:11	08/26/18 03:33	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:11	08/26/18 03:33	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:11	08/26/18 03:33	1

Client Sample ID: OB-23-082118
Date Collected: 08/21/18 14:55
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/25/18 10:11	08/26/18 03:33	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:11	08/26/18 03:33	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:11	08/26/18 03:33	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:11	08/26/18 03:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:11	08/26/18 04:10	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:11	08/26/18 04:10	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:11	08/26/18 04:10	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 04:10	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 04:10	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 04:10	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:11	08/26/18 04:10	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:11	08/26/18 04:10	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:11	08/26/18 04:10	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:11	08/26/18 04:10	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:11	08/26/18 04:10	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:11	08/26/18 04:10	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:11	08/26/18 04:10	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:11	08/26/18 04:10	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:11	08/26/18 04:10	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:11	08/26/18 04:10	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:11	08/26/18 04:10	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 04:10	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:11	08/26/18 04:10	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:11	08/26/18 04:10	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 04:10	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:11	08/26/18 04:10	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 04:10	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:11	08/26/18 04:10	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:11	08/26/18 04:10	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:11	08/26/18 04:10	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:11	08/26/18 04:10	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:11	08/26/18 04:10	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 04:10	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 04:10	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:11	08/26/18 04:10	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:11	08/26/18 04:10	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:11	08/26/18 04:10	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:11	08/26/18 04:10	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:11	08/26/18 04:10	1
N-Nitrosodiphenylamine	**1.0**	**J**	10	0.89	ug/L		08/25/18 10:11	08/26/18 04:10	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 04:10	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:11	08/26/18 04:10	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:11	08/26/18 04:10	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:11	08/26/18 04:10	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:11	08/26/18 04:10	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:11	08/26/18 04:10	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:11	08/26/18 04:10	1

Client Sample ID: OB-23-082118
Date Collected: 08/21/18 14:55
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:11	08/26/18 04:10	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:11	08/26/18 04:10	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:11	08/26/18 04:10	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:11	08/26/18 04:10	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:11	08/26/18 04:10	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:11	08/26/18 04:10	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 04:10	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:11	08/26/18 04:10	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 10:11	08/26/18 04:10	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:11	08/26/18 04:10	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 10:11	08/26/18 04:10	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:11	08/26/18 04:10	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 04:10	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 04:10	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:11	08/26/18 04:10	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 04:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*32*	*J*	*ug/L*		*6.72*		*08/25/18 10:11*	*08/26/18 04:10*	*1*
Cyclohexanamine, N-cyclohexyl-	*23*	*J N*	*ug/L*		*6.89*	*101-83-7*	*08/25/18 10:11*	*08/26/18 04:10*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*97*		*30 - 130*	*08/25/18 10:11*	*08/26/18 04:10*	*1*
Phenol-d5 (Surr)	*31*		*15 - 110*	*08/25/18 10:11*	*08/26/18 04:10*	*1*
Terphenyl-d14 (Surr)	*97*		*30 - 130*	*08/25/18 10:11*	*08/26/18 04:10*	*1*
2,4,6-Tribromophenol (Surr)	*107*		*15 - 110*	*08/25/18 10:11*	*08/26/18 04:10*	*1*
2-Fluorophenol (Surr)	*45*		*15 - 110*	*08/25/18 10:11*	*08/26/18 04:10*	*1*
2-Fluorobiphenyl	*95*		*30 - 130*	*08/25/18 10:11*	*08/26/18 04:10*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:35	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:35	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:35	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:35	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:35	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:35	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 04:35	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 04:35	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 04:35	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 04:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*59*		*30 - 150*	*08/24/18 18:58*	*08/26/18 04:35*	*1*
Tetrachloro-m-xylene	*57*		*30 - 150*	*08/24/18 18:58*	*08/26/18 04:35*	*1*
DCB Decachlorobiphenyl	*69*		*30 - 150*	*08/24/18 18:58*	*08/26/18 04:35*	*1*
DCB Decachlorobiphenyl	*70*		*30 - 150*	*08/24/18 18:58*	*08/26/18 04:35*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**2.56**		0.60	0.33	mg/L			08/26/18 14:38	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**63.2**	**D**	2.40	1.56	mg/L			08/27/18 09:00	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 09:26	08/28/18 16:40	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 09:26	08/28/18 16:40	2
Barium	**373**		4.0	1.1	ug/L		08/28/18 09:26	08/28/18 16:40	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 09:26	08/28/18 16:40	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 09:26	08/28/18 16:40	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:40	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:40	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 09:26	08/28/18 16:40	2
Manganese	**1620**		8.0	2.7	ug/L		08/28/18 09:26	08/28/18 16:40	2
Nickel	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 16:40	2
Lead	**1.1**	**J**	1.2	0.37	ug/L		08/28/18 09:26	08/28/18 16:40	2
Antimony	**1.2**	**J B**	2.0	0.62	ug/L		08/28/18 09:26	08/28/18 16:40	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 09:26	08/28/18 16:40	2
Vanadium	**1.3**	**J**	4.0	1.2	ug/L		08/28/18 09:26	08/28/18 16:40	2
Zinc	**10.8**	**J**	16.0	5.4	ug/L		08/28/18 09:26	08/28/18 16:40	2
Aluminum	**33.4**	**J**	40.0	15.0	ug/L		08/28/18 09:26	08/28/18 16:40	2
Sodium	**66400**		200	75.7	ug/L		08/28/18 09:26	08/28/18 16:40	2
Magnesium	**10600**		200	65.7	ug/L		08/28/18 09:26	08/28/18 16:40	2
Potassium	**6840**		200	64.9	ug/L		08/28/18 09:26	08/28/18 16:40	2
Calcium	**91500**		200	67.6	ug/L		08/28/18 09:26	08/28/18 16:40	2
Iron	**44200**		120	45.7	ug/L		08/28/18 09:26	08/28/18 16:40	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 09:26	08/28/18 16:40	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/25/18 05:20	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/25/18 05:20	2
Barium	**265**		4.0	1.1	ug/L		08/25/18 00:02	08/25/18 05:20	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/25/18 05:20	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/25/18 05:20	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 05:20	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 05:20	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/27/18 22:14	2
Manganese	**1430**		8.0	2.7	ug/L		08/25/18 00:02	08/25/18 05:20	2
Nickel	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 05:20	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/25/18 05:20	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/25/18 05:20	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/25/18 05:20	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/25/18 05:20	2
Zinc	5.4	U	16.0	5.4	ug/L		08/25/18 00:02	08/25/18 05:20	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/25/18 05:20	2
Sodium	**56800**		200	75.7	ug/L		08/25/18 00:02	08/25/18 05:20	2
Magnesium	**8820**		200	65.7	ug/L		08/25/18 00:02	08/25/18 05:20	2
Potassium	**6440**		200	64.9	ug/L		08/25/18 00:02	08/25/18 05:20	2
Calcium	**87300**		200	67.6	ug/L		08/25/18 00:02	08/25/18 05:20	2
Iron	**10000**		120	45.7	ug/L		08/25/18 00:02	08/25/18 05:20	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/25/18 05:20	2

Client Sample ID: OB-23-082118

Lab Sample ID: 460-163149-16
Matrix: Water
Date Collected: 08/21/18 14:55
Date Received: 08/22/18 16:45

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:06	08/24/18 14:31	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0063	J	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:39	1
Bicarbonate Alkalinity as CaCO3	348		5.0	5.0	mg/L			08/24/18 13:09	1
Alkalinity	348		5.0	5.0	mg/L			08/24/18 13:09	1

Client Sample ID: OB-3-082218

Lab Sample ID: 460-163149-17
Matrix: Water
Date Collected: 08/22/18 10:00
Date Received: 08/22/18 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 17:33	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 17:33	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*70 - 130*		*08/24/18 17:33*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 10:23	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 10:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 10:23	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 10:23	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 10:23	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 10:23	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 10:23	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 10:23	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 10:23	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 10:23	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 10:23	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 10:23	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 10:23	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 10:23	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 10:23	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 10:23	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 10:23	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 10:23	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 10:23	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 10:23	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 10:23	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 10:23	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 10:23	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 10:23	1

Client Sample ID: OB-3-082218
Date Collected: 08/22/18 10:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 10:23	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 10:23	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 10:23	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 10:23	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 10:23	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 10:23	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 10:23	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 10:23	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 10:23	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 10:23	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 10:23	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/26/18 10:23	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 10:23	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 10:23	1
Methylene Chloride	**0.32**	**J**	1.0	0.32	ug/L			08/26/18 10:23	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 10:23	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 10:23	1
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 10:23	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 10:23	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 10:23	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 10:23	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 10:23	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 10:23	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 10:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 10:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/26/18 10:23*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*08/26/18 10:23*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/26/18 10:23*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/26/18 10:23*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.017	U	0.21	0.017	ug/L		08/24/18 09:07	08/24/18 20:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/24/18 09:07*	*08/24/18 20:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:11	08/26/18 03:54	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:11	08/26/18 03:54	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:11	08/26/18 03:54	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:11	08/26/18 03:54	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:11	08/26/18 03:54	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/25/18 10:11	08/26/18 03:54	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:11	08/26/18 03:54	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:11	08/26/18 03:54	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-3-082218
Date Collected: 08/22/18 10:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:11	08/26/18 03:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:11	08/26/18 04:31	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:11	08/26/18 04:31	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:11	08/26/18 04:31	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 04:31	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 04:31	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 04:31	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:11	08/26/18 04:31	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:11	08/26/18 04:31	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:11	08/26/18 04:31	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:11	08/26/18 04:31	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:11	08/26/18 04:31	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:11	08/26/18 04:31	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:11	08/26/18 04:31	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:11	08/26/18 04:31	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:11	08/26/18 04:31	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:11	08/26/18 04:31	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:11	08/26/18 04:31	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 04:31	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:11	08/26/18 04:31	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:11	08/26/18 04:31	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 04:31	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:11	08/26/18 04:31	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 04:31	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:11	08/26/18 04:31	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:11	08/26/18 04:31	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:11	08/26/18 04:31	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:11	08/26/18 04:31	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:11	08/26/18 04:31	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 04:31	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 04:31	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:11	08/26/18 04:31	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:11	08/26/18 04:31	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:11	08/26/18 04:31	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:11	08/26/18 04:31	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:11	08/26/18 04:31	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:11	08/26/18 04:31	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 04:31	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:11	08/26/18 04:31	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:11	08/26/18 04:31	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:11	08/26/18 04:31	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:11	08/26/18 04:31	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:11	08/26/18 04:31	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:11	08/26/18 04:31	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:11	08/26/18 04:31	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:11	08/26/18 04:31	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:11	08/26/18 04:31	1

Client Sample ID: OB-3-082218
Date Collected: 08/22/18 10:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:11	08/26/18 04:31	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:11	08/26/18 04:31	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:11	08/26/18 04:31	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 04:31	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:11	08/26/18 04:31	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 10:11	08/26/18 04:31	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:11	08/26/18 04:31	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 10:11	08/26/18 04:31	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:11	08/26/18 04:31	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 04:31	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 04:31	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:11	08/26/18 04:31	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 04:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:11*	*08/26/18 04:31*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*104*		*30 - 130*	*08/25/18 10:11*	*08/26/18 04:31*	*1*
Phenol-d5 (Surr)	*28*		*15 - 110*	*08/25/18 10:11*	*08/26/18 04:31*	*1*
Terphenyl-d14 (Surr)	*97*		*30 - 130*	*08/25/18 10:11*	*08/26/18 04:31*	*1*
2,4,6-Tribromophenol (Surr)	*113*	*X*	*15 - 110*	*08/25/18 10:11*	*08/26/18 04:31*	*1*
2-Fluorophenol (Surr)	*43*		*15 - 110*	*08/25/18 10:11*	*08/26/18 04:31*	*1*
2-Fluorobiphenyl	*100*		*30 - 130*	*08/25/18 10:11*	*08/26/18 04:31*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:58	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:58	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:58	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:58	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:58	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 04:58	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 04:58	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 04:58	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 04:58	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 04:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*67*		*30 - 150*	*08/24/18 18:58*	*08/26/18 04:58*	*1*
Tetrachloro-m-xylene	*67*		*30 - 150*	*08/24/18 18:58*	*08/26/18 04:58*	*1*
DCB Decachlorobiphenyl	*74*		*30 - 150*	*08/24/18 18:58*	*08/26/18 04:58*	*1*
DCB Decachlorobiphenyl	*76*		*30 - 150*	*08/24/18 18:58*	*08/26/18 04:58*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.40**		0.12	0.078	mg/L			08/26/18 14:50	1
Sulfate	**8.79**		0.60	0.33	mg/L			08/26/18 14:50	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-3-082218
Date Collected: 08/22/18 10:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-17
Matrix: Water

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 09:26	08/28/18 17:04	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 09:26	08/28/18 17:04	2
Barium	**3.0**	**J**	4.0	1.1	ug/L		08/28/18 09:26	08/28/18 17:04	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 09:26	08/28/18 17:04	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 09:26	08/28/18 17:04	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 17:04	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 17:04	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 09:26	08/28/18 17:04	2
Manganese	**9.3**		8.0	2.7	ug/L		08/28/18 09:26	08/28/18 17:04	2
Nickel	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 17:04	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 09:26	08/28/18 17:04	2
Antimony	**1.0**	**J B**	2.0	0.62	ug/L		08/28/18 09:26	08/28/18 17:04	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 09:26	08/28/18 17:04	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 09:26	08/28/18 17:04	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 09:26	08/28/18 17:04	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/28/18 09:26	08/28/18 17:04	2
Sodium	**4780**		200	75.7	ug/L		08/28/18 09:26	08/28/18 17:04	2
Magnesium	**3230**		200	65.7	ug/L		08/28/18 09:26	08/28/18 17:04	2
Potassium	**1020**		200	64.9	ug/L		08/28/18 09:26	08/28/18 17:04	2
Calcium	**9520**		200	67.6	ug/L		08/28/18 09:26	08/28/18 17:04	2
Iron	**1930**		120	45.7	ug/L		08/28/18 09:26	08/28/18 17:04	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 09:26	08/28/18 17:04	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/30/18 02:48	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/30/18 02:48	2
Barium	**2.8**	**J**	4.0	1.1	ug/L		08/25/18 00:02	08/30/18 02:48	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/30/18 02:48	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/30/18 02:48	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:48	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:48	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/30/18 02:48	2
Manganese	**15.2**		8.0	2.7	ug/L		08/25/18 00:02	08/30/18 02:48	2
Nickel	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:48	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/30/18 02:48	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/30/18 02:48	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/30/18 02:48	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/30/18 02:48	2
Zinc	5.4	U	16.0	5.4	ug/L		08/25/18 00:02	08/30/18 02:48	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/30/18 02:48	2
Sodium	**3540**		200	75.7	ug/L		08/25/18 00:02	08/30/18 02:48	2
Magnesium	**2480**		200	65.7	ug/L		08/25/18 00:02	08/30/18 02:48	2
Potassium	**902**		200	64.9	ug/L		08/25/18 00:02	08/30/18 02:48	2
Calcium	**8650**		200	67.6	ug/L		08/25/18 00:02	08/30/18 02:48	2
Iron	45.7	U	120	45.7	ug/L		08/25/18 00:02	08/30/18 02:48	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/30/18 02:48	2

Client Sample ID: OB-3-082218

Lab Sample ID: 460-163149-17
Date Collected: 08/22/18 10:00
Matrix: Water
Date Received: 08/22/18 16:45

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:06	08/24/18 14:33	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:40	1
Bicarbonate Alkalinity as CaCO3	**28.8**		5.0	5.0	mg/L			08/24/18 13:17	1
Alkalinity	**28.8**		5.0	5.0	mg/L			08/24/18 13:17	1

Client Sample ID: OB-24-082218

Lab Sample ID: 460-163149-18
Date Collected: 08/22/18 10:25
Matrix: Water
Date Received: 08/22/18 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 17:56	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 17:56	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*70 - 130*		*08/24/18 17:56*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 10:45	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 10:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 10:45	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 10:45	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 10:45	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 10:45	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 10:45	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 10:45	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 10:45	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 10:45	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 10:45	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 10:45	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 10:45	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 10:45	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 10:45	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 10:45	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 10:45	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 10:45	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 10:45	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 10:45	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 10:45	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 10:45	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 10:45	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 10:45	1

Client Sample ID: OB-24-082218

Date Collected: 08/22/18 10:25
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-18

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 10:45	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 10:45	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 10:45	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 10:45	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 10:45	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 10:45	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 10:45	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 10:45	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 10:45	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 10:45	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 10:45	1
Methyl acetate	0.31	U *	5.0	0.31	ug/L			08/26/18 10:45	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 10:45	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 10:45	1
Methylene Chloride	**0.37**	**J**	1.0	0.32	ug/L			08/26/18 10:45	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 10:45	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 10:45	1
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 10:45	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 10:45	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 10:45	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 10:45	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 10:45	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 10:45	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 10:45	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 10:45*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/18 10:45*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*08/26/18 10:45*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/26/18 10:45*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*08/26/18 10:45*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/24/18 09:07	08/24/18 20:18	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/24/18 09:07*	*08/24/18 20:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:11	08/26/18 04:15	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:11	08/26/18 04:15	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:11	08/26/18 04:15	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:11	08/26/18 04:15	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:11	08/26/18 04:15	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/25/18 10:11	08/26/18 04:15	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:11	08/26/18 04:15	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:11	08/26/18 04:15	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-24-082218
Date Collected: 08/22/18 10:25
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:11	08/26/18 04:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:11	08/26/18 04:52	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:11	08/26/18 04:52	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:11	08/26/18 04:52	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 04:52	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 04:52	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 04:52	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:11	08/26/18 04:52	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:11	08/26/18 04:52	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:11	08/26/18 04:52	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:11	08/26/18 04:52	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:11	08/26/18 04:52	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:11	08/26/18 04:52	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:11	08/26/18 04:52	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:11	08/26/18 04:52	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:11	08/26/18 04:52	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:11	08/26/18 04:52	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:11	08/26/18 04:52	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 04:52	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:11	08/26/18 04:52	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:11	08/26/18 04:52	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 04:52	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:11	08/26/18 04:52	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 04:52	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:11	08/26/18 04:52	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:11	08/26/18 04:52	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:11	08/26/18 04:52	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:11	08/26/18 04:52	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:11	08/26/18 04:52	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 04:52	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/26/18 04:52	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:11	08/26/18 04:52	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:11	08/26/18 04:52	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:11	08/26/18 04:52	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:11	08/26/18 04:52	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:11	08/26/18 04:52	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:11	08/26/18 04:52	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 04:52	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:11	08/26/18 04:52	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:11	08/26/18 04:52	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:11	08/26/18 04:52	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:11	08/26/18 04:52	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:11	08/26/18 04:52	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:11	08/26/18 04:52	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:11	08/26/18 04:52	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:11	08/26/18 04:52	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:11	08/26/18 04:52	1

Client Sample ID: OB-24-082218
Date Collected: 08/22/18 10:25
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:11	08/26/18 04:52	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:11	08/26/18 04:52	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:11	08/26/18 04:52	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 04:52	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:11	08/26/18 04:52	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 10:11	08/26/18 04:52	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:11	08/26/18 04:52	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 10:11	08/26/18 04:52	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:11	08/26/18 04:52	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/26/18 04:52	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/26/18 04:52	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:11	08/26/18 04:52	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/26/18 04:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:11*	*08/26/18 04:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*99*		*30 - 130*	*08/25/18 10:11*	*08/26/18 04:52*	*1*
Phenol-d5 (Surr)	*27*		*15 - 110*	*08/25/18 10:11*	*08/26/18 04:52*	*1*
Terphenyl-d14 (Surr)	*94*		*30 - 130*	*08/25/18 10:11*	*08/26/18 04:52*	*1*
2,4,6-Tribromophenol (Surr)	*105*		*15 - 110*	*08/25/18 10:11*	*08/26/18 04:52*	*1*
2-Fluorophenol (Surr)	*42*		*15 - 110*	*08/25/18 10:11*	*08/26/18 04:52*	*1*
2-Fluorobiphenyl	*94*		*30 - 130*	*08/25/18 10:11*	*08/26/18 04:52*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 05:22	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 05:22	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 05:22	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 05:22	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 05:22	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 05:22	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 05:22	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 05:22	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 05:22	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*30 - 150*	*08/24/18 18:58*	*08/26/18 05:22*	*1*
Tetrachloro-m-xylene	*67*		*30 - 150*	*08/24/18 18:58*	*08/26/18 05:22*	*1*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*08/24/18 18:58*	*08/26/18 05:22*	*1*
DCB Decachlorobiphenyl	*78*		*30 - 150*	*08/24/18 18:58*	*08/26/18 05:22*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**27.4**		0.60	0.33	mg/L			08/26/18 15:01	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**73.8**	**D**	3.00	1.95	mg/L			08/27/18 10:06	25

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 09:26	08/28/18 17:06	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 09:26	08/28/18 17:06	2
Barium	**38.7**		4.0	1.1	ug/L		08/28/18 09:26	08/28/18 17:06	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 09:26	08/28/18 17:06	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 09:26	08/28/18 17:06	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 17:06	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 17:06	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 09:26	08/28/18 17:06	2
Manganese	**273**		8.0	2.7	ug/L		08/28/18 09:26	08/28/18 17:06	2
Nickel	1.3	U	4.0	1.3	ug/L		08/28/18 09:26	08/28/18 17:06	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 09:26	08/28/18 17:06	2
Antimony	**0.76**	**J B**	2.0	0.62	ug/L		08/28/18 09:26	08/28/18 17:06	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 09:26	08/28/18 17:06	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 09:26	08/28/18 17:06	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 09:26	08/28/18 17:06	2
Aluminum	**19.7**	**J**	40.0	15.0	ug/L		08/28/18 09:26	08/28/18 17:06	2
Sodium	**18000**		200	75.7	ug/L		08/28/18 09:26	08/28/18 17:06	2
Magnesium	**24400**		200	65.7	ug/L		08/28/18 09:26	08/28/18 17:06	2
Potassium	**2350**		200	64.9	ug/L		08/28/18 09:26	08/28/18 17:06	2
Calcium	**93900**		200	67.6	ug/L		08/28/18 09:26	08/28/18 17:06	2
Iron	**46.7**	**J**	120	45.7	ug/L		08/28/18 09:26	08/28/18 17:06	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 09:26	08/28/18 17:06	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/25/18 00:02	08/30/18 02:55	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/25/18 00:02	08/30/18 02:55	2
Barium	**32.3**		4.0	1.1	ug/L		08/25/18 00:02	08/30/18 02:55	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/25/18 00:02	08/30/18 02:55	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/25/18 00:02	08/30/18 02:55	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:55	2
Chromium	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:55	2
Copper	1.9	U	4.0	1.9	ug/L		08/25/18 00:02	08/30/18 02:55	2
Manganese	**22.0**		8.0	2.7	ug/L		08/25/18 00:02	08/30/18 02:55	2
Nickel	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/30/18 02:55	2
Lead	0.37	U	1.2	0.37	ug/L		08/25/18 00:02	08/30/18 02:55	2
Antimony	0.62	U	2.0	0.62	ug/L		08/25/18 00:02	08/30/18 02:55	2
Selenium	0.69	U	10.0	0.69	ug/L		08/25/18 00:02	08/30/18 02:55	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/25/18 00:02	08/30/18 02:55	2
Zinc	5.4	U	16.0	5.4	ug/L		08/25/18 00:02	08/30/18 02:55	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/25/18 00:02	08/30/18 02:55	2
Sodium	**14400**		200	75.7	ug/L		08/25/18 00:02	08/30/18 02:55	2
Magnesium	**20100**		200	65.7	ug/L		08/25/18 00:02	08/30/18 02:55	2
Potassium	**2110**		200	64.9	ug/L		08/25/18 00:02	08/30/18 02:55	2
Calcium	**85100**		200	67.6	ug/L		08/25/18 00:02	08/30/18 02:55	2
Iron	45.7	U	120	45.7	ug/L		08/25/18 00:02	08/30/18 02:55	2
Thallium	0.24	U	0.80	0.24	ug/L		08/25/18 00:02	08/30/18 02:55	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:15	08/24/18 14:51	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Client Sample ID: OB-24-082218
Date Collected: 08/22/18 10:25
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-18
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:41	1
Bicarbonate Alkalinity as CaCO3	220		5.0	5.0	mg/L			08/24/18 13:24	1
Alkalinity	220		5.0	5.0	mg/L			08/24/18 13:24	1

Surrogate Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
460-163149-1	OB-25-082118	97	92	90	103
460-163149-2	OB-7-082118	96	93	89	103
460-163149-2 MS	OB-7-082118	97	95	93	105
460-163149-2 MSD	OB-7-082118	94	95	92	104
460-163149-3	OB-6-082118	95	94	92	103
460-163149-4	OB-4-082118	98	96	94	105
460-163149-5	OB-16-082118	95	93	92	101
460-163149-6	OB-18-082118	97	94	92	102
460-163149-7	OB-17-082118	97	94	93	104
460-163149-8	Dup-01-082118	96	93	92	103
460-163149-9	OB-28-082118	99	94	94	104
460-163149-10	OB-22-082118	97	93	92	104
460-163149-11	RW-16-082118	101	96	96	105
460-163149-12	OB-14A-082118	97	94	92	103
460-163149-13	OB-14B-082118	101	96	95	103
460-163149-14	FB-01-082118	100	93	94	103
460-163149-15	TB-01-082218	95	96	93	104
460-163149-16	OB-23-082118	103	94	96	103
460-163149-17	OB-3-082218	96	93	93	103
460-163149-18	OB-24-082218	97	95	94	104
LCS 460-547498/4	Lab Control Sample	94	93	93	103
LCS 460-547593/4	Lab Control Sample	96	99	96	108
LCSD 460-547498/5	Lab Control Sample Dup	95	95	93	106
LCSD 460-547593/5	Lab Control Sample Dup	94	95	95	104
MB 460-547498/10	Method Blank	97	94	93	105
MB 460-547593/9	Method Blank	98	97	97	107

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(70-130)
460-163149-1	OB-25-082118	109
460-163149-2	OB-7-082118	110
460-163149-2 MS	OB-7-082118	109
460-163149-2 MSD	OB-7-082118	111
460-163149-3	OB-6-082118	109
460-163149-4	OB-4-082118	108
460-163149-5	OB-16-082118	109
460-163149-6	OB-18-082118	107
460-163149-7	OB-17-082118	108
460-163149-8	Dup-01-082118	106

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	BFB (70-130)						
460-163149-9	OB-28-082118	107						
460-163149-10	OB-22-082118	106						
460-163149-11	RW-16-082118	105						
460-163149-12	OB-14A-082118	107						
460-163149-13	OB-14B-082118	107						
460-163149-14	FB-01-082118	109						
460-163149-15	TB-01-082218	111						
460-163149-16	OB-23-082118	109						
460-163149-17	OB-3-082218	106						
460-163149-18	OB-24-082218	105						
LCS 460-547015/3	Lab Control Sample	111						
LCS 460-547967/4	Lab Control Sample	107						
LCSD 460-547015/4	Lab Control Sample Dup	111						
LCSD 460-547967/5	Lab Control Sample Dup	107						
MB 460-547015/7	Method Blank	109						
MB 460-547967/8	Method Blank	106						

Surrogate Legend

BFB = 4-Bromofluorobenzene

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	NBZ (30-130)	PHL (15-110)	TPHL (30-130)	TBP (15-110)	2FP (15-110)	FBP (30-130)		
460-163149-1	OB-25-082118	74	13 X	97	78	33	75		
460-163149-2	OB-7-082118	89	15	98	88	41	94		
460-163149-2 MS	OB-7-082118	85	22	89	96	36	88		
460-163149-2 MSD	OB-7-082118	89	23	90	99	39	92		
460-163149-3	OB-6-082118	93	17	102	87	43	90		
460-163149-4	OB-4-082118	86	15	95	84	40	86		
460-163149-5	OB-16-082118	87	14 X	96	90	40	93		
460-163149-6	OB-18-082118	88	14 X	100	72	38	96		
460-163149-7	OB-17-082118	81	13 X	91	87	37	89		
460-163149-8	Dup-01-082118	71	11 X	99	82	32	73		
460-163149-9	OB-28-082118	82	14 X	96	92	38	87		
460-163149-10	OB-22-082118	84	14 X	110	88	39	83		
460-163149-11	RW-16-082118	79	13 X	95	86	36	78		
460-163149-12	OB-14A-082118	90	19	97	103	43	92		
460-163149-13	OB-14B-082118	104	28	96	118 X	44	99		
460-163149-14	FB-01-082118	107	29	100	113 X	45	101		
460-163149-16	OB-23-082118	97	31	97	107	45	95		
460-163149-17	OB-3-082218	104	28	97	113 X	43	100		
460-163149-18	OB-24-082218	99	27	94	105	42	94		
460-163182-E-2-A MS	Matrix Spike	96	26	83	107	40	94		
460-163182-E-2-B MSD	Matrix Spike Duplicate	92	28	82	108	42	91		
LCS 460-547339/2-A	Lab Control Sample	91	23	93	95	39	94		
LCS 460-547339/3-A	Lab Control Sample	93	16	103	89	45	99		

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	PHL	TPHL	TBP	2FP	FBP
Lab Sample ID	Client Sample ID	(30-130)	(15-110)	(30-130)	(15-110)	(15-110)	(30-130)
LCS 460-547376/2-A	Lab Control Sample	105	25	104	121 X	39	101
LCS 460-547376/3-A	Lab Control Sample	97	23	102	105	38	92
MB 460-547339/1-A	Method Blank	91	17	98	83	43	93
MB 460-547376/1-A	Method Blank	103	24	113	119 X	39	98

Surrogate Legend

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

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCBP1	DCBP2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
460-163149-1	OB-25-082118	63	64	73	77
460-163149-2	OB-7-082118	63	62	71	74
460-163149-2 MS	OB-7-082118	61	61	70	72
460-163149-2 MSD	OB-7-082118	63	65	72	76
460-163149-3	OB-6-082118	62	61	72	73
460-163149-4	OB-4-082118	63	64	71	75
460-163149-5	OB-16-082118	62	63	71	74
460-163149-6	OB-18-082118	65	65	73	75
460-163149-7	OB-17-082118	63	63	70	72
460-163149-8	Dup-01-082118	62	63	70	75
460-163149-9	OB-28-082118	69	71	79	84
460-163149-10	OB-22-082118	58	59	66	70
460-163149-11	RW-16-082118	56	58	64	68
460-163149-12	OB-14A-082118	60	59	69	70
460-163149-13	OB-14B-082118	55	62	63	73
460-163149-14	FB-01-082118	61	61	70	72
460-163149-16	OB-23-082118	59	57	69	70
460-163149-17	OB-3-082218	67	67	74	76
460-163149-18	OB-24-082218	68	67	77	78
LCS 460-547236/2-A	Lab Control Sample	73	72	82	82
MB 460-547236/1-A	Method Blank	75	75	82	86

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Isotope Dilution Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (10-150)							
460-163149-1	OB-25-082118	40							
460-163149-2	OB-7-082118	37							
460-163149-2 MS	OB-7-082118	39							
460-163149-2 MSD	OB-7-082118	45							
460-163149-3	OB-6-082118	41							
460-163149-4	OB-4-082118	39							
460-163149-5	OB-16-082118	38							
460-163149-6	OB-18-082118	37							
460-163149-7	OB-17-082118	38							
460-163149-8	Dup-01-082118	40							
460-163149-9	OB-28-082118	43							
460-163149-10	OB-22-082118	42							
460-163149-11	RW-16-082118	40							
460-163149-12	OB-14A-082118	37							
460-163149-13	OB-14B-082118	39							
460-163149-14	FB-01-082118	39							
460-163149-16	OB-23-082118	40							
460-163149-17	OB-3-082218	37							
460-163149-18	OB-24-082218	37							
MB 460-547073/1-A	Method Blank	36							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (10-200)							
LCS 460-547073/2-A	Lab Control Sample	34							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-547498/10
Matrix: Water
Analysis Batch: 547498

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 03:42	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 03:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 03:42	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 03:42	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 03:42	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 03:42	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 03:42	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 03:42	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 03:42	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 03:42	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 03:42	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 03:42	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 03:42	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 03:42	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 03:42	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 03:42	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 03:42	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 03:42	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 03:42	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 03:42	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 03:42	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 03:42	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 03:42	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 03:42	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 03:42	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 03:42	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 03:42	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 03:42	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 03:42	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 03:42	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 03:42	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 03:42	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 03:42	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 03:42	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 03:42	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/26/18 03:42	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 03:42	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 03:42	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/26/18 03:42	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 03:42	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 03:42	1
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 03:42	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 03:42	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 03:42	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 03:42	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 03:42	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 03:42	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 03:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/18 03:42*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*08/26/18 03:42*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/26/18 03:42*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*08/26/18 03:42*	*1*

Lab Sample ID: LCS 460-547498/4
Matrix: Water
Analysis Batch: 547498

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	18.5		ug/L		93	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.6		ug/L		108	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.4		ug/L		107	70 - 130
1,1,2-Trichloroethane	20.0	20.0		ug/L		100	70 - 130
1,1-Dichloroethane	20.0	22.2		ug/L		111	70 - 130
1,1-Dichloroethene	20.0	21.8		ug/L		109	70 - 130
1,2,3-Trichlorobenzene	20.0	16.6		ug/L		83	70 - 130
1,2,4-Trichlorobenzene	20.0	17.0		ug/L		85	70 - 130
1,2-Dichlorobenzene	20.0	20.3		ug/L		101	70 - 130
1,2-Dichloroethane	20.0	18.8		ug/L		94	70 - 130
1,2-Dichloropropane	20.0	22.4		ug/L		112	70 - 130
1,3-Dichlorobenzene	20.0	20.5		ug/L		103	70 - 130
1,4-Dichlorobenzene	20.0	20.0		ug/L		100	70 - 130
2-Butanone (MEK)	100	91.5		ug/L		91	40 - 160
2-Hexanone	100	97.4		ug/L		97	40 - 160
4-Methyl-2-pentanone (MIBK)	100	100		ug/L		100	40 - 160
Acetone	100	102		ug/L		102	40 - 160
Benzene	20.0	22.5		ug/L		112	70 - 130
Bromoform	20.0	18.1		ug/L		90	70 - 130
Bromomethane	20.0	21.6		ug/L		108	40 - 160
Carbon disulfide	20.0	21.8		ug/L		109	40 - 160
Carbon tetrachloride	20.0	17.8		ug/L		89	70 - 130
Chlorobenzene	20.0	20.1		ug/L		100	70 - 130
Chlorobromomethane	20.0	17.6		ug/L		88	70 - 130
Chlorodibromomethane	20.0	17.8		ug/L		89	70 - 130
Chloroethane	20.0	25.1		ug/L		126	40 - 160
Chloroform	20.0	19.2		ug/L		96	70 - 130
Chloromethane	20.0	22.1		ug/L		110	40 - 160
cis-1,2-Dichloroethene	20.0	19.7		ug/L		99	70 - 130
cis-1,3-Dichloropropene	20.0	21.8		ug/L		109	70 - 130
Cyclohexane	20.0	21.2		ug/L		106	70 - 130
Dichlorobromomethane	20.0	19.3		ug/L		96	70 - 130
Dichlorodifluoromethane	20.0	21.4		ug/L		107	40 - 160
Ethylbenzene	20.0	19.7		ug/L		99	70 - 130
Isopropylbenzene	20.0	20.1		ug/L		100	70 - 130
Methyl acetate	40.0	53.1	*	ug/L		133	70 - 130
Methyl tert-butyl ether	20.0	21.1		ug/L		105	70 - 130
Methylcyclohexane	20.0	19.4		ug/L		97	70 - 130
Methylene Chloride	20.0	21.0		ug/L		105	70 - 130
Styrene	20.0	20.3		ug/L		102	70 - 130
Tetrachloroethene	20.0	18.0		ug/L		90	70 - 130
Toluene	20.0	20.9		ug/L		105	70 - 130
trans-1,2-Dichloroethene	20.0	20.4		ug/L		102	70 - 130

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

Lab Sample ID: LCS 460-547498/4
Matrix: Water
Analysis Batch: 547498

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	20.0	20.1		ug/L		100	70 - 130
Trichloroethene	20.0	20.1		ug/L		100	70 - 130
Trichlorofluoromethane	20.0	18.7		ug/L		94	40 - 160
Vinyl chloride	20.0	24.0		ug/L		120	70 - 130
Xylenes, Total	40.0	40.4		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 460-547498/5
Matrix: Water
Analysis Batch: 547498

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	17.8		ug/L		89	70 - 130	4	20
1,1,2,2-Tetrachloroethane	20.0	21.1		ug/L		105	70 - 130	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.4		ug/L		102	70 - 130	5	20
1,1,2-Trichloroethane	20.0	19.6		ug/L		98	70 - 130	2	20
1,1-Dichloroethane	20.0	22.1		ug/L		110	70 - 130	0	20
1,1-Dichloroethene	20.0	20.8		ug/L		104	70 - 130	5	20
1,2,3-Trichlorobenzene	20.0	16.4		ug/L		82	70 - 130	1	20
1,2,4-Trichlorobenzene	20.0	16.5		ug/L		83	70 - 130	3	20
1,2-Dichlorobenzene	20.0	19.6		ug/L		98	70 - 130	4	20
1,2-Dichloroethane	20.0	18.3		ug/L		91	70 - 130	3	20
1,2-Dichloropropane	20.0	22.1		ug/L		111	70 - 130	1	20
1,3-Dichlorobenzene	20.0	19.7		ug/L		99	70 - 130	4	20
1,4-Dichlorobenzene	20.0	19.6		ug/L		98	70 - 130	2	20
2-Butanone (MEK)	100	88.0		ug/L		88	40 - 160	4	20
2-Hexanone	100	92.9		ug/L		93	40 - 160	5	20
4-Methyl-2-pentanone (MIBK)	100	101		ug/L		101	40 - 160	1	20
Acetone	100	98.3		ug/L		98	40 - 160	3	20
Benzene	20.0	22.0		ug/L		110	70 - 130	2	20
Bromoform	20.0	18.1		ug/L		90	70 - 130	0	20
Bromomethane	20.0	21.8		ug/L		109	40 - 160	1	20
Carbon disulfide	20.0	21.4		ug/L		107	40 - 160	2	20
Carbon tetrachloride	20.0	17.3		ug/L		86	70 - 130	3	20
Chlorobenzene	20.0	19.6		ug/L		98	70 - 130	2	20
Chlorobromomethane	20.0	17.6		ug/L		88	70 - 130	0	20
Chlorodibromomethane	20.0	18.1		ug/L		90	70 - 130	1	20
Chloroethane	20.0	24.0		ug/L		120	40 - 160	5	20
Chloroform	20.0	18.9		ug/L		94	70 - 130	2	20
Chloromethane	20.0	22.6		ug/L		113	40 - 160	2	20
cis-1,2-Dichloroethene	20.0	19.5		ug/L		97	70 - 130	1	20
cis-1,3-Dichloropropene	20.0	21.4		ug/L		107	70 - 130	2	20

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

Lab Sample ID: LCSD 460-547498/5
Matrix: Water
Analysis Batch: 547498

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyclohexane	20.0	20.7		ug/L		104	70 - 130	2	20
Dichlorobromomethane	20.0	18.5		ug/L		93	70 - 130	4	20
Dichlorodifluoromethane	20.0	20.2		ug/L		101	40 - 160	6	20
Ethylbenzene	20.0	20.0		ug/L		100	70 - 130	1	20
Isopropylbenzene	20.0	20.1		ug/L		100	70 - 130	0	20
Methyl acetate	40.0	52.7	*	ug/L		132	70 - 130	1	20
Methyl tert-butyl ether	20.0	20.4		ug/L		102	70 - 130	3	20
Methylcyclohexane	20.0	19.7		ug/L		98	70 - 130	1	20
Methylene Chloride	20.0	20.3		ug/L		102	70 - 130	3	20
Styrene	20.0	19.9		ug/L		99	70 - 130	2	20
Tetrachloroethene	20.0	18.0		ug/L		90	70 - 130	0	20
Toluene	20.0	20.5		ug/L		103	70 - 130	2	20
trans-1,2-Dichloroethene	20.0	20.4		ug/L		102	70 - 130	0	20
trans-1,3-Dichloropropene	20.0	20.2		ug/L		101	70 - 130	1	20
Trichloroethene	20.0	18.8		ug/L		94	70 - 130	6	20
Trichlorofluoromethane	20.0	18.2		ug/L		91	40 - 160	3	20
Vinyl chloride	20.0	23.6		ug/L		118	70 - 130	1	20
Xylenes, Total	40.0	40.7		ug/L		102	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547498

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.24	U	20.0	18.9		ug/L		94	70 - 130
1,1,2,2-Tetrachloroethane	0.37	U	20.0	23.1		ug/L		115	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	22.1		ug/L		111	70 - 130
1,1,2-Trichloroethane	0.43	U	20.0	20.9		ug/L		105	70 - 130
1,1-Dichloroethane	0.26	U	20.0	22.6		ug/L		113	70 - 130
1,1-Dichloroethene	0.12	U	20.0	22.1		ug/L		111	70 - 130
1,2,3-Trichlorobenzene	0.36	U	20.0	14.6		ug/L		73	70 - 130
1,2,4-Trichlorobenzene	0.37	U	20.0	16.6		ug/L		83	70 - 130
1,2-Dichlorobenzene	0.43	U	20.0	20.7		ug/L		103	70 - 130
1,2-Dichloroethane	0.43	U	20.0	18.8		ug/L		94	70 - 130
1,2-Dichloropropane	0.35	U	20.0	23.0		ug/L		115	70 - 130
1,3-Dichlorobenzene	0.34	U	20.0	20.5		ug/L		103	70 - 130
1,4-Dichlorobenzene	0.76	U	20.0	20.2		ug/L		101	70 - 130
2-Butanone (MEK)	1.9	U	100	92.5		ug/L		92	40 - 160
2-Hexanone	2.9	U	100	94.1		ug/L		94	40 - 160
4-Methyl-2-pentanone (MIBK)	2.7	U	100	102		ug/L		102	40 - 160
Acetone	5.0	U	100	96.3		ug/L		96	40 - 160

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

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547498

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.43	U	20.0	22.9		ug/L		115	70 - 130
Bromoform	0.54	U	20.0	18.2		ug/L		91	70 - 130
Bromomethane	1.0	U	20.0	22.1		ug/L		110	40 - 160
Carbon disulfide	0.16	U	20.0	22.3		ug/L		111	40 - 160
Carbon tetrachloride	0.21	U	20.0	17.8		ug/L		89	70 - 130
Chlorobenzene	0.38	U	20.0	20.6		ug/L		103	70 - 130
Chlorobromomethane	0.41	U	20.0	18.8		ug/L		94	70 - 130
Chlorodibromomethane	0.28	U	20.0	18.3		ug/L		92	70 - 130
Chloroethane	0.32	U	20.0	25.6		ug/L		128	40 - 160
Chloroform	0.33	U	20.0	19.8		ug/L		99	70 - 130
Chloromethane	0.14	U	20.0	21.8		ug/L		109	40 - 160
cis-1,2-Dichloroethene	0.22	U	20.0	19.8		ug/L		99	70 - 130
cis-1,3-Dichloropropene	0.46	U	20.0	21.9		ug/L		110	70 - 130
Cyclohexane	0.32	U	20.0	22.1		ug/L		110	70 - 130
Dichlorobromomethane	0.34	U	20.0	19.3		ug/L		97	70 - 130
Dichlorodifluoromethane	0.12	U	20.0	22.1		ug/L		110	40 - 160
Ethylbenzene	0.30	U	20.0	21.2		ug/L		106	70 - 130
Isopropylbenzene	0.34	U	20.0	20.9		ug/L		105	70 - 130
Methyl acetate	0.31	U F1 *	40.0	54.4	F1	ug/L		136	70 - 130
Methyl tert-butyl ether	0.47	U	20.0	21.7		ug/L		108	70 - 130
Methylcyclohexane	0.26	U	20.0	20.5		ug/L		102	70 - 130
Methylene Chloride	0.32	U	20.0	21.3		ug/L		106	70 - 130
Styrene	0.42	U	20.0	20.5		ug/L		102	70 - 130
Tetrachloroethene	0.25	U	20.0	18.8		ug/L		94	70 - 130
Toluene	0.38	U	20.0	22.0		ug/L		110	70 - 130
trans-1,2-Dichloroethene	0.24	U	20.0	21.1		ug/L		106	70 - 130
trans-1,3-Dichloropropene	0.49	U	20.0	21.0		ug/L		105	70 - 130
Trichloroethene	0.31	U	20.0	20.4		ug/L		102	70 - 130
Trichlorofluoromethane	0.14	U	20.0	19.7		ug/L		98	40 - 160
Vinyl chloride	0.17	U	20.0	24.4		ug/L		122	70 - 130
Xylenes, Total	0.65	U	40.0	40.9		ug/L		102	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: 460-163149-2 MSD
Matrix: Water
Analysis Batch: 547498

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.24	U	20.0	17.3		ug/L		86	70 - 130	9	20
1,1,2,2-Tetrachloroethane	0.37	U	20.0	21.2		ug/L		106	70 - 130	8	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	20.7		ug/L		103	70 - 130	7	20
1,1,2-Trichloroethane	0.43	U	20.0	20.0		ug/L		100	70 - 130	5	20

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

Lab Sample ID: 460-163149-2 MSD
Matrix: Water
Analysis Batch: 547498

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.26	U	20.0	20.6		ug/L		103	70 - 130	9	20
1,1-Dichloroethene	0.12	U	20.0	20.0		ug/L		100	70 - 130	10	20
1,2,3-Trichlorobenzene	0.36	U	20.0	16.2		ug/L		81	70 - 130	10	20
1,2,4-Trichlorobenzene	0.37	U	20.0	16.1		ug/L		80	70 - 130	3	20
1,2-Dichlorobenzene	0.43	U	20.0	19.1		ug/L		96	70 - 130	8	20
1,2-Dichloroethane	0.43	U	20.0	17.9		ug/L		89	70 - 130	5	20
1,2-Dichloropropane	0.35	U	20.0	21.3		ug/L		107	70 - 130	8	20
1,3-Dichlorobenzene	0.34	U	20.0	18.7		ug/L		94	70 - 130	9	20
1,4-Dichlorobenzene	0.76	U	20.0	18.7		ug/L		93	70 - 130	8	20
2-Butanone (MEK)	1.9	U	100	84.6		ug/L		85	40 - 160	9	20
2-Hexanone	2.9	U	100	87.3		ug/L		87	40 - 160	8	20
4-Methyl-2-pentanone (MIBK)	2.7	U	100	94.2		ug/L		94	40 - 160	8	20
Acetone	5.0	U	100	92.3		ug/L		92	40 - 160	4	20
Benzene	0.43	U	20.0	21.8		ug/L		109	70 - 130	5	20
Bromoform	0.54	U	20.0	16.7		ug/L		83	70 - 130	9	20
Bromomethane	1.0	U	20.0	20.6		ug/L		103	40 - 160	7	20
Carbon disulfide	0.16	U	20.0	20.3		ug/L		102	40 - 160	9	20
Carbon tetrachloride	0.21	U	20.0	16.2		ug/L		81	70 - 130	10	20
Chlorobenzene	0.38	U	20.0	19.0		ug/L		95	70 - 130	8	20
Chlorobromomethane	0.41	U	20.0	17.2		ug/L		86	70 - 130	9	20
Chlorodibromomethane	0.28	U	20.0	16.7		ug/L		84	70 - 130	9	20
Chloroethane	0.32	U	20.0	23.3		ug/L		116	40 - 160	9	20
Chloroform	0.33	U	20.0	18.0		ug/L		90	70 - 130	10	20
Chloromethane	0.14	U	20.0	19.8		ug/L		99	40 - 160	9	20
cis-1,2-Dichloroethene	0.22	U	20.0	18.5		ug/L		92	70 - 130	7	20
cis-1,3-Dichloropropene	0.46	U	20.0	20.1		ug/L		100	70 - 130	9	20
Cyclohexane	0.32	U	20.0	19.9		ug/L		99	70 - 130	11	20
Dichlorobromomethane	0.34	U	20.0	18.0		ug/L		90	70 - 130	7	20
Dichlorodifluoromethane	0.12	U	20.0	21.1		ug/L		106	40 - 160	4	20
Ethylbenzene	0.30	U	20.0	19.4		ug/L		97	70 - 130	9	20
Isopropylbenzene	0.34	U	20.0	19.2		ug/L		96	70 - 130	9	20
Methyl acetate	0.31	U F1 *	40.0	49.3		ug/L		123	70 - 130	10	20
Methyl tert-butyl ether	0.47	U	20.0	19.9		ug/L		100	70 - 130	8	20
Methylcyclohexane	0.26	U	20.0	18.8		ug/L		94	70 - 130	9	20
Methylene Chloride	0.32	U	20.0	19.6		ug/L		98	70 - 130	8	20
Styrene	0.42	U	20.0	19.1		ug/L		96	70 - 130	7	20
Tetrachloroethene	0.25	U	20.0	17.3		ug/L		87	70 - 130	8	20
Toluene	0.38	U	20.0	20.5		ug/L		103	70 - 130	7	20
trans-1,2-Dichloroethene	0.24	U	20.0	19.4		ug/L		97	70 - 130	8	20
trans-1,3-Dichloropropene	0.49	U	20.0	20.2		ug/L		101	70 - 130	4	20
Trichloroethene	0.31	U	20.0	18.6		ug/L		93	70 - 130	9	20
Trichlorofluoromethane	0.14	U	20.0	18.1		ug/L		91	40 - 160	8	20
Vinyl chloride	0.17	U	20.0	22.7		ug/L		113	70 - 130	7	20
Xylenes, Total	0.65	U	40.0	38.5		ug/L		96	70 - 130	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene	*95*		*70 - 130*

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

Lab Sample ID: 460-163149-2 MSD
Matrix: Water
Analysis Batch: 547498

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 460-547593/9
Matrix: Water
Analysis Batch: 547593

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/26/18 21:59	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/26/18 21:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/26/18 21:59	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 21:59	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/26/18 21:59	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/26/18 21:59	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/26/18 21:59	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/26/18 21:59	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/26/18 21:59	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/26/18 21:59	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/26/18 21:59	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/26/18 21:59	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/26/18 21:59	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/26/18 21:59	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/26/18 21:59	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/26/18 21:59	1
Acetone	5.0	U	5.0	5.0	ug/L			08/26/18 21:59	1
Benzene	0.43	U	1.0	0.43	ug/L			08/26/18 21:59	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/26/18 21:59	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/26/18 21:59	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/26/18 21:59	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/26/18 21:59	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/26/18 21:59	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/26/18 21:59	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/26/18 21:59	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/26/18 21:59	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/26/18 21:59	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/26/18 21:59	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/26/18 21:59	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/26/18 21:59	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/26/18 21:59	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/26/18 21:59	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/26/18 21:59	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/26/18 21:59	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/26/18 21:59	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/26/18 21:59	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/26/18 21:59	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/26/18 21:59	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/26/18 21:59	1
Styrene	0.42	U	1.0	0.42	ug/L			08/26/18 21:59	1

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

Lab Sample ID: MB 460-547593/9
Matrix: Water
Analysis Batch: 547593

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/26/18 21:59	1
Toluene	0.38	U	1.0	0.38	ug/L			08/26/18 21:59	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/26/18 21:59	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/26/18 21:59	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/26/18 21:59	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/26/18 21:59	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/26/18 21:59	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/26/18 21:59	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/26/18 21:59*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/26/18 21:59*	*1*
4-Bromofluorobenzene	*97*		*70 - 130*		*08/26/18 21:59*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*08/26/18 21:59*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*08/26/18 21:59*	*1*

Lab Sample ID: LCS 460-547593/4
Matrix: Water
Analysis Batch: 547593

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.4		ug/L		97	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.3		ug/L		106	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.0		ug/L		110	70 - 130
1,1,2-Trichloroethane	20.0	20.6		ug/L		103	70 - 130
1,1-Dichloroethane	20.0	22.8		ug/L		114	70 - 130
1,1-Dichloroethene	20.0	21.9		ug/L		109	70 - 130
1,2,3-Trichlorobenzene	20.0	17.0		ug/L		85	70 - 130
1,2,4-Trichlorobenzene	20.0	17.6		ug/L		88	70 - 130
1,2-Dichlorobenzene	20.0	20.7		ug/L		103	70 - 130
1,2-Dichloroethane	20.0	18.8		ug/L		94	70 - 130
1,2-Dichloropropane	20.0	22.7		ug/L		113	70 - 130
1,3-Dichlorobenzene	20.0	20.8		ug/L		104	70 - 130
1,4-Dichlorobenzene	20.0	20.3		ug/L		101	70 - 130
2-Butanone (MEK)	100	88.5		ug/L		88	40 - 160
2-Hexanone	100	90.7		ug/L		91	40 - 160
4-Methyl-2-pentanone (MIBK)	100	100		ug/L		100	40 - 160
Acetone	100	104		ug/L		104	40 - 160
Benzene	20.0	22.8		ug/L		114	70 - 130
Bromoform	20.0	20.5		ug/L		102	70 - 130
Bromomethane	20.0	22.3		ug/L		111	40 - 160
Carbon disulfide	20.0	22.4		ug/L		112	40 - 160
Carbon tetrachloride	20.0	18.9		ug/L		94	70 - 130
Chlorobenzene	20.0	20.5		ug/L		102	70 - 130
Chlorobromomethane	20.0	19.0		ug/L		95	70 - 130

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

Lab Sample ID: LCS 460-547593/4
Matrix: Water
Analysis Batch: 547593

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorodibromomethane	20.0	19.1		ug/L		95	70 - 130
Chloroethane	20.0	25.0		ug/L		125	40 - 160
Chloroform	20.0	19.5		ug/L		97	70 - 130
Chloromethane	20.0	22.4		ug/L		112	40 - 160
cis-1,2-Dichloroethene	20.0	20.2		ug/L		101	70 - 130
cis-1,3-Dichloropropene	20.0	21.8		ug/L		109	70 - 130
Cyclohexane	20.0	21.6		ug/L		108	70 - 130
Dichlorobromomethane	20.0	19.8		ug/L		99	70 - 130
Dichlorodifluoromethane	20.0	20.7		ug/L		103	40 - 160
Ethylbenzene	20.0	20.8		ug/L		104	70 - 130
Isopropylbenzene	20.0	20.9		ug/L		104	70 - 130
Methyl acetate	40.0	50.8		ug/L		127	70 - 130
Methyl tert-butyl ether	20.0	21.1		ug/L		106	70 - 130
Methylcyclohexane	20.0	20.3		ug/L		102	70 - 130
Methylene Chloride	20.0	21.4		ug/L		107	70 - 130
Styrene	20.0	20.5		ug/L		103	70 - 130
Tetrachloroethene	20.0	19.5		ug/L		97	70 - 130
Toluene	20.0	21.8		ug/L		109	70 - 130
trans-1,2-Dichloroethene	20.0	21.3		ug/L		106	70 - 130
trans-1,3-Dichloropropene	20.0	20.8		ug/L		104	70 - 130
Trichloroethene	20.0	19.9		ug/L		100	70 - 130
Trichlorofluoromethane	20.0	19.3		ug/L		96	40 - 160
Vinyl chloride	20.0	24.6		ug/L		123	70 - 130
Xylenes, Total	40.0	41.1		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 460-547593/5
Matrix: Water
Analysis Batch: 547593

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	18.8		ug/L		94	70 - 130	3	20
1,1,2,2-Tetrachloroethane	20.0	20.6		ug/L		103	70 - 130	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.2		ug/L		106	70 - 130	4	20
1,1,2-Trichloroethane	20.0	19.7		ug/L		99	70 - 130	4	20
1,1-Dichloroethane	20.0	22.5		ug/L		113	70 - 130	1	20
1,1-Dichloroethene	20.0	21.6		ug/L		108	70 - 130	1	20
1,2,3-Trichlorobenzene	20.0	16.3		ug/L		82	70 - 130	4	20
1,2,4-Trichlorobenzene	20.0	16.9		ug/L		85	70 - 130	4	20
1,2-Dichlorobenzene	20.0	20.1		ug/L		100	70 - 130	3	20
1,2-Dichloroethane	20.0	18.5		ug/L		92	70 - 130	2	20
1,2-Dichloropropane	20.0	22.5		ug/L		113	70 - 130	1	20

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

Lab Sample ID: LCSD 460-547593/5
Matrix: Water
Analysis Batch: 547593

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene			20.0	20.2		ug/L		101	70 - 130	3	20
1,4-Dichlorobenzene			20.0	20.3		ug/L		101	70 - 130	0	20
2-Butanone (MEK)			100	92.5		ug/L		92	40 - 160	4	20
2-Hexanone			100	93.9		ug/L		94	40 - 160	4	20
4-Methyl-2-pentanone (MIBK)			100	95.7		ug/L		96	40 - 160	5	20
Acetone			100	105		ug/L		105	40 - 160	2	20
Benzene			20.0	22.0		ug/L		110	70 - 130	4	20
Bromoform			20.0	18.4		ug/L		92	70 - 130	11	20
Bromomethane			20.0	21.4		ug/L		107	40 - 160	4	20
Carbon disulfide			20.0	21.4		ug/L		107	40 - 160	5	20
Carbon tetrachloride			20.0	18.6		ug/L		93	70 - 130	1	20
Chlorobenzene			20.0	20.0		ug/L		100	70 - 130	2	20
Chlorobromomethane			20.0	18.5		ug/L		92	70 - 130	3	20
Chlorodibromomethane			20.0	18.9		ug/L		95	70 - 130	1	20
Chloroethane			20.0	24.1		ug/L		121	40 - 160	4	20
Chloroform			20.0	20.5		ug/L		103	70 - 130	5	20
Chloromethane			20.0	21.8		ug/L		109	40 - 160	3	20
cis-1,2-Dichloroethene			20.0	20.2		ug/L		101	70 - 130	0	20
cis-1,3-Dichloropropene			20.0	21.7		ug/L		109	70 - 130	0	20
Cyclohexane			20.0	21.5		ug/L		107	70 - 130	1	20
Dichlorobromomethane			20.0	19.0		ug/L		95	70 - 130	4	20
Dichlorodifluoromethane			20.0	20.6		ug/L		103	40 - 160	1	20
Ethylbenzene			20.0	20.1		ug/L		100	70 - 130	3	20
Isopropylbenzene			20.0	20.7		ug/L		103	70 - 130	1	20
Methyl acetate			40.0	54.3	*	ug/L		136	70 - 130	7	20
Methyl tert-butyl ether			20.0	20.5		ug/L		103	70 - 130	3	20
Methylcyclohexane			20.0	19.6		ug/L		98	70 - 130	4	20
Methylene Chloride			20.0	20.9		ug/L		105	70 - 130	2	20
Styrene			20.0	19.8		ug/L		99	70 - 130	4	20
Tetrachloroethene			20.0	18.9		ug/L		94	70 - 130	3	20
Toluene			20.0	21.1		ug/L		105	70 - 130	3	20
trans-1,2-Dichloroethene			20.0	20.6		ug/L		103	70 - 130	3	20
trans-1,3-Dichloropropene			20.0	20.9		ug/L		104	70 - 130	0	20
Trichloroethene			20.0	19.6		ug/L		98	70 - 130	2	20
Trichlorofluoromethane			20.0	19.2		ug/L		96	40 - 160	1	20
Vinyl chloride			20.0	23.7		ug/L		118	70 - 130	4	20
Xylenes, Total			40.0	40.8		ug/L		102	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 460-547015/7
Matrix: Water
Analysis Batch: 547015

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/24/18 09:46	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/24/18 09:46	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/24/18 09:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*70 - 130*		*08/24/18 09:46*	*1*

Lab Sample ID: LCS 460-547015/3
Matrix: Water
Analysis Batch: 547015

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.0500	0.0502		ug/L		100	40 - 160		
Ethylene Dibromide			0.0500	0.0455		ug/L		91	70 - 130		
1,2,3-Trichloropropane			0.0500	0.0523		ug/L		105	40 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*111*		*70 - 130*

Lab Sample ID: LCSD 460-547015/4
Matrix: Water
Analysis Batch: 547015

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.0500	0.0500		ug/L		100	40 - 160	0	20
Ethylene Dibromide			0.0500	0.0458		ug/L		92	70 - 130	1	20
1,2,3-Trichloropropane			0.0500	0.0527		ug/L		105	40 - 160	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*111*		*70 - 130*

Lab Sample ID: MB 460-547967/8
Matrix: Water
Analysis Batch: 547967

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 09:57	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 09:57	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 09:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*70 - 130*		*08/28/18 09:57*	*1*

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

Lab Sample ID: LCS 460-547967/4
Matrix: Water
Analysis Batch: 547967

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.0500	0.0559		ug/L		112	40 - 160
Ethylene Dibromide	0.0500	0.0488		ug/L		98	70 - 130
1,2,3-Trichloropropane	0.0500	0.0534		ug/L		107	40 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*70 - 130*

Lab Sample ID: LCSD 460-547967/5
Matrix: Water
Analysis Batch: 547967

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.0500	0.0499		ug/L		100	40 - 160	11	20
Ethylene Dibromide	0.0500	0.0470		ug/L		94	70 - 130	4	20
1,2,3-Trichloropropane	0.0500	0.0495		ug/L		99	40 - 160	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*70 - 130*

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547967

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.0040	U	0.0500	0.0645		ug/L		129	40 - 160
Ethylene Dibromide	0.0010	U	0.0500	0.0523		ug/L		105	70 - 130
1,2,3-Trichloropropane	0.0030	U	0.0500	0.0622		ug/L		124	40 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*70 - 130*

Lab Sample ID: 460-163149-2 MSD
Matrix: Water
Analysis Batch: 547967

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.0040	U	0.0500	0.0645		ug/L		129	40 - 160	0	20
Ethylene Dibromide	0.0010	U	0.0500	0.0551		ug/L		110	70 - 130	5	20
1,2,3-Trichloropropane	0.0030	U	0.0500	0.0587		ug/L		117	40 - 160	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*111*		*70 - 130*

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

Lab Sample ID: MB 460-547339/1-A
Matrix: Water
Analysis Batch: 547427

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547339

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 07:09	08/25/18 18:35	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 07:09	08/25/18 18:35	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/25/18 07:09	08/25/18 18:35	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/25/18 18:35	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/25/18 18:35	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/25/18 18:35	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 07:09	08/25/18 18:35	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/25/18 18:35	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 07:09	08/25/18 18:35	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 07:09	08/25/18 18:35	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 07:09	08/25/18 18:35	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 07:09	08/25/18 18:35	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 07:09	08/25/18 18:35	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		08/25/18 07:09	08/25/18 18:35	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		08/25/18 07:09	08/25/18 18:35	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 07:09	08/25/18 18:35	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 07:09	08/25/18 18:35	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 07:09	08/25/18 18:35	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 07:09	08/25/18 18:35	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 18:35	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 07:09	08/25/18 18:35	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 07:09	08/25/18 18:35	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 18:35	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 07:09	08/25/18 18:35	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/25/18 18:35	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 07:09	08/25/18 18:35	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 07:09	08/25/18 18:35	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 07:09	08/25/18 18:35	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 07:09	08/25/18 18:35	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 07:09	08/25/18 18:35	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 18:35	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 07:09	08/25/18 18:35	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 07:09	08/25/18 18:35	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 07:09	08/25/18 18:35	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 07:09	08/25/18 18:35	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 07:09	08/25/18 18:35	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 07:09	08/25/18 18:35	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 07:09	08/25/18 18:35	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/25/18 18:35	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		08/25/18 07:09	08/25/18 18:35	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 07:09	08/25/18 18:35	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/25/18 18:35	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/25/18 18:35	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/25/18 18:35	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 07:09	08/25/18 18:35	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 07:09	08/25/18 18:35	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 07:09	08/25/18 18:35	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		08/25/18 07:09	08/25/18 18:35	1

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

Lab Sample ID: MB 460-547339/1-A
Matrix: Water
Analysis Batch: 547427

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547339

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 07:09	08/25/18 18:35	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 07:09	08/25/18 18:35	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 07:09	08/25/18 18:35	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		08/25/18 07:09	08/25/18 18:35	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 07:09	08/25/18 18:35	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		08/25/18 07:09	08/25/18 18:35	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/25/18 18:35	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		08/25/18 07:09	08/25/18 18:35	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/25/18 18:35	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/25/18 18:35	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 07:09	08/25/18 18:35	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 07:09	08/25/18 18:35	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 07:09	08/25/18 18:35	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 07:09	08/25/18 18:35	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 07:09	08/25/18 18:35	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 07:09	08/25/18 18:35	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 07:09	08/25/18 18:35	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 07:09	08/25/18 18:35	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 07:09	08/25/18 18:35	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 07:09*	*08/25/18 18:35*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*91*		*30 - 130*	*08/25/18 07:09*	*08/25/18 18:35*	*1*
Phenol-d5 (Surr)	*17*		*15 - 110*	*08/25/18 07:09*	*08/25/18 18:35*	*1*
Terphenyl-d14 (Surr)	*98*		*30 - 130*	*08/25/18 07:09*	*08/25/18 18:35*	*1*
2,4,6-Tribromophenol (Surr)	*83*		*15 - 110*	*08/25/18 07:09*	*08/25/18 18:35*	*1*
2-Fluorophenol (Surr)	*43*		*15 - 110*	*08/25/18 07:09*	*08/25/18 18:35*	*1*
2-Fluorobiphenyl	*93*		*30 - 130*	*08/25/18 07:09*	*08/25/18 18:35*	*1*

Lab Sample ID: LCS 460-547339/2-A
Matrix: Water
Analysis Batch: 547427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	80.0	22.9		ug/L		29	20 - 160
2-Chlorophenol	80.0	57.7		ug/L		72	70 - 130
2-Methylphenol	80.0	42.6	*	ug/L		53	70 - 130
4-Methylphenol	80.0	41.7		ug/L		52	20 - 160
2-Nitrophenol	80.0	73.7		ug/L		92	70 - 130
2,4-Dimethylphenol	80.0	63.9		ug/L		80	70 - 130
2,4-Dichlorophenol	80.0	67.9		ug/L		85	70 - 130
4-Chloro-3-methylphenol	80.0	63.6		ug/L		80	20 - 160
2,4,6-Trichlorophenol	80.0	69.9		ug/L		87	70 - 130
2,4,5-Trichlorophenol	80.0	68.6		ug/L		86	20 - 160
2,4-Dinitrotoluene	80.0	76.0		ug/L		95	70 - 130

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

Lab Sample ID: LCS 460-547339/2-A
Matrix: Water
Analysis Batch: 547427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitrophenol	160	46.3		ug/L		29	20 - 160
4,6-Dinitro-2-methylphenol	160	157		ug/L		98	20 - 160
Pentachlorophenol	160	119		ug/L		74	20 - 160
Bis(2-chloroethyl)ether	80.0	69.5		ug/L		87	70 - 130
N-Nitrosodi-n-propylamine	80.0	68.8		ug/L		86	70 - 130
Hexachloroethane	80.0	53.7		ug/L		67	20 - 160
Nitrobenzene	80.0	69.9		ug/L		87	70 - 130
Isophorone	80.0	75.0		ug/L		94	70 - 130
Naphthalene	80.0	66.5		ug/L		83	70 - 130
4-Chloroaniline	80.0	66.0		ug/L		82	20 - 160
Hexachlorobutadiene	80.0	59.3		ug/L		74	70 - 130
2-Methylnaphthalene	80.0	69.2		ug/L		87	70 - 130
Hexachlorocyclopentadiene	80.0	56.9		ug/L		71	20 - 160
2-Chloronaphthalene	80.0	72.1		ug/L		90	70 - 130
2-Nitroaniline	80.0	72.7		ug/L		91	20 - 160
Dimethyl phthalate	80.0	74.2		ug/L		93	70 - 130
Acenaphthylene	80.0	77.1		ug/L		96	70 - 130
2,6-Dinitrotoluene	80.0	75.9		ug/L		95	70 - 130
3-Nitroaniline	80.0	59.9		ug/L		75	20 - 160
Acenaphthene	80.0	66.3		ug/L		83	70 - 130
Dibenzofuran	80.0	73.8		ug/L		92	70 - 130
2,4-Dinitrophenol	160	123		ug/L		77	20 - 160
Diethyl phthalate	80.0	74.8		ug/L		93	70 - 130
4-Chlorophenyl phenyl ether	80.0	73.0		ug/L		91	70 - 130
Fluorene	80.0	73.3		ug/L		92	70 - 130
4-Nitroaniline	80.0	68.6		ug/L		86	20 - 160
N-Nitrosodiphenylamine	80.0	77.9		ug/L		97	70 - 130
4-Bromophenyl phenyl ether	80.0	76.9		ug/L		96	70 - 130
Hexachlorobenzene	80.0	76.0		ug/L		95	70 - 130
Phenanthrene	80.0	76.3		ug/L		95	70 - 130
Anthracene	80.0	77.3		ug/L		97	70 - 130
Carbazole	80.0	77.3		ug/L		97	70 - 130
Di-n-butyl phthalate	80.0	82.1		ug/L		103	70 - 130
Fluoranthene	80.0	79.2		ug/L		99	70 - 130
Pyrene	80.0	78.3		ug/L		98	70 - 130
Butyl benzyl phthalate	80.0	81.4		ug/L		102	70 - 130
Benzo[a]anthracene	80.0	77.9		ug/L		97	70 - 130
Chrysene	80.0	78.9		ug/L		99	70 - 130
Bis(2-ethylhexyl) phthalate	80.0	81.8		ug/L		102	70 - 130
Di-n-octyl phthalate	80.0	82.0		ug/L		103	70 - 130
Benzo[b]fluoranthene	80.0	79.7		ug/L		100	70 - 130
Benzo[k]fluoranthene	80.0	85.7		ug/L		107	70 - 130
Benzo[a]pyrene	80.0	81.3		ug/L		102	70 - 130
Indeno[1,2,3-cd]pyrene	80.0	85.0		ug/L		106	70 - 130
Dibenz(a,h)anthracene	80.0	88.9		ug/L		111	70 - 130
Benzo[g,h,i]perylene	80.0	86.2		ug/L		108	70 - 130
1,1'-Biphenyl	80.0	71.8		ug/L		90	70 - 130
Acetophenone	80.0	68.7		ug/L		86	70 - 130

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

Lab Sample ID: LCS 460-547339/2-A
Matrix: Water
Analysis Batch: 547427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2'-oxybis[1-chloropropane]	80.0	70.6		ug/L		88	70 - 130
1,2,4,5-Tetrachlorobenzene	80.0	69.5		ug/L		87	70 - 130
2,3,4,6-Tetrachlorophenol	80.0	67.7		ug/L		85	70 - 130
3,3'-Dichlorobenzidine	80.0	75.6		ug/L		95	70 - 130
Bis(2-chloroethoxy)methane	80.0	74.5		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*91*		*30 - 130*
Phenol-d5 (Surr)	*23*		*15 - 110*
Terphenyl-d14 (Surr)	*93*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*95*		*15 - 110*
2-Fluorophenol (Surr)	*39*		*15 - 110*
2-Fluorobiphenyl	*94*		*30 - 130*

Lab Sample ID: LCS 460-547339/3-A
Matrix: Water
Analysis Batch: 547427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	160	147		ug/L		92	20 - 160
Caprolactam	160	32.2		ug/L		20	20 - 160
Atrazine	160	148		ug/L		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*93*		*30 - 130*
Phenol-d5 (Surr)	*16*		*15 - 110*
Terphenyl-d14 (Surr)	*103*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*89*		*15 - 110*
2-Fluorophenol (Surr)	*45*		*15 - 110*
2-Fluorobiphenyl	*99*		*30 - 130*

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547427

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 547339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	0.29	U	80.0	22.2		ug/L		28	20 - 160
2-Chlorophenol	0.38	U	80.0	57.0		ug/L		71	70 - 130
2-Methylphenol	0.26	U * F1	80.0	42.1	F1	ug/L		53	70 - 130
4-Methylphenol	0.24	U	80.0	41.2		ug/L		51	20 - 160
2-Nitrophenol	0.75	U	80.0	73.8		ug/L		92	70 - 130
2,4-Dimethylphenol	0.24	U	80.0	62.2		ug/L		78	70 - 130
2,4-Dichlorophenol	0.42	U	80.0	66.7		ug/L		83	70 - 130
4-Chloro-3-methylphenol	0.58	U	80.0	63.0		ug/L		79	20 - 160
2,4,6-Trichlorophenol	0.30	U	80.0	69.6		ug/L		87	20 - 160
2,4,5-Trichlorophenol	0.28	U	80.0	71.7		ug/L		90	20 - 160
2,4-Dinitrotoluene	1.0	U	80.0	80.6		ug/L		101	70 - 130
4-Nitrophenol	0.69	U	160	48.6		ug/L		30	20 - 160

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

Lab Sample ID: 460-163149-2 MS | **Client Sample ID: OB-7-082118**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 547427 | **Prep Batch: 547339**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,6-Dinitro-2-methylphenol	13	U	160	160		ug/L		100	20 - 160
Pentachlorophenol	1.4	U	160	119		ug/L		75	20 - 160
Bis(2-chloroethyl)ether	0.30	U	80.0	69.7		ug/L		87	70 - 130
N-Nitrosodi-n-propylamine	0.43	U	80.0	68.7		ug/L		86	70 - 130
Hexachloroethane	1.2	U	80.0	51.8		ug/L		65	20 - 160
Nitrobenzene	0.57	U	80.0	68.7		ug/L		86	70 - 130
Isophorone	0.80	U	80.0	74.4		ug/L		93	70 - 130
Naphthalene	1.1	U	80.0	68.4		ug/L		86	70 - 130
4-Chloroaniline	1.9	U	80.0	61.3		ug/L		77	20 - 160
Hexachlorobutadiene	0.78	U	80.0	58.3		ug/L		73	70 - 130
2-Methylnaphthalene	1.1	U	80.0	69.1		ug/L		86	70 - 130
Hexachlorocyclopentadiene	1.7	U	80.0	53.0		ug/L		66	20 - 160
2-Chloronaphthalene	1.2	U	80.0	71.6		ug/L		90	70 - 130
2-Nitroaniline	0.47	U	80.0	73.9		ug/L		92	20 - 160
Dimethyl phthalate	0.77	U	80.0	78.1		ug/L		98	70 - 130
Acenaphthylene	0.82	U	80.0	77.8		ug/L		97	70 - 130
2,6-Dinitrotoluene	0.39	U	80.0	79.7		ug/L		100	70 - 130
3-Nitroaniline	0.96	U	80.0	60.2		ug/L		75	20 - 160
Acenaphthene	1.1	U	80.0	66.0		ug/L		83	70 - 130
Dibenzofuran	1.1	U	80.0	74.6		ug/L		93	70 - 130
2,4-Dinitrophenol	14	U	160	120		ug/L		75	20 - 160
Diethyl phthalate	0.98	U	80.0	79.0		ug/L		99	70 - 130
4-Chlorophenyl phenyl ether	1.3	U	80.0	75.8		ug/L		95	70 - 130
Fluorene	0.91	U	80.0	75.7		ug/L		95	70 - 130
4-Nitroaniline	0.54	U	80.0	70.7		ug/L		88	20 - 160
N-Nitrosodiphenylamine	0.89	U	80.0	79.0		ug/L		99	70 - 130
4-Bromophenyl phenyl ether	0.75	U	80.0	80.0		ug/L		100	70 - 130
Hexachlorobenzene	0.40	U	80.0	79.3		ug/L		99	70 - 130
Phenanthrene	0.58	U	80.0	78.8		ug/L		98	70 - 130
Anthracene	0.63	U	80.0	80.1		ug/L		100	70 - 130
Carbazole	0.68	U	80.0	79.6		ug/L		100	70 - 130
Di-n-butyl phthalate	0.84	U	80.0	85.3		ug/L		107	70 - 130
Fluoranthene	0.84	U	80.0	80.1		ug/L		100	70 - 130
Pyrene	1.6	U	80.0	82.1		ug/L		103	70 - 130
Butyl benzyl phthalate	0.85	U	80.0	86.9		ug/L		109	70 - 130
Benzo[a]anthracene	0.59	U	80.0	81.2		ug/L		101	70 - 130
Chrysene	0.91	U	80.0	82.2		ug/L		103	70 - 130
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	86.4		ug/L		108	70 - 130
Di-n-octyl phthalate	4.8	U	80.0	87.0		ug/L		109	70 - 130
Benzo[b]fluoranthene	1.1	U	80.0	83.1		ug/L		104	70 - 130
Benzo[k]fluoranthene	0.67	U	80.0	88.5		ug/L		111	70 - 130
Benzo[a]pyrene	0.41	U	80.0	85.1		ug/L		106	70 - 130
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	92.1		ug/L		115	70 - 130
Dibenz(a,h)anthracene	0.72	U	80.0	93.1		ug/L		116	70 - 130
Benzo[g,h,i]perylene	1.4	U	80.0	86.9		ug/L		109	70 - 130
1,1'-Biphenyl	1.2	U	80.0	73.6		ug/L		92	70 - 130
Acetophenone	0.79	U	80.0	68.8		ug/L		86	70 - 130
Benzaldehyde	0.59	U	160	141		ug/L		88	20 - 160

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

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547427

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 547339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Caprolactam	0.68	U F1	160	29.9	F1	ug/L		19	20 - 160
Atrazine	1.3	U	160	172		ug/L		108	70 - 130
2,2'-oxybis[1-chloropropane]	0.63	U	80.0	68.8		ug/L		86	70 - 130
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	68.5		ug/L		86	70 - 130
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	73.3		ug/L		92	70 - 130
3,3'-Dichlorobenzidine	1.4	U	80.0	70.8		ug/L		89	70 - 130
Bis(2-chloroethoxy)methane	0.24	U	80.0	73.5		ug/L		92	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*85*		*30 - 130*
Phenol-d5 (Surr)	*22*		*15 - 110*
Terphenyl-d14 (Surr)	*89*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*96*		*15 - 110*
2-Fluorophenol (Surr)	*36*		*15 - 110*
2-Fluorobiphenyl	*88*		*30 - 130*

Lab Sample ID: 460-163149-2 MSD
Matrix: Water
Analysis Batch: 547427

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 547339

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	0.29	U	80.0	23.7		ug/L		30	20 - 160	7	20
2-Chlorophenol	0.38	U	80.0	59.1		ug/L		74	70 - 130	4	20
2-Methylphenol	0.26	U * F1	80.0	43.3	F1	ug/L		54	70 - 130	3	20
4-Methylphenol	0.24	U	80.0	41.9		ug/L		52	20 - 160	2	20
2-Nitrophenol	0.75	U	80.0	75.9		ug/L		95	70 - 130	3	20
2,4-Dimethylphenol	0.24	U	80.0	64.4		ug/L		80	70 - 130	4	20
2,4-Dichlorophenol	0.42	U	80.0	69.6		ug/L		87	70 - 130	4	20
4-Chloro-3-methylphenol	0.58	U	80.0	65.8		ug/L		82	20 - 160	4	20
2,4,6-Trichlorophenol	0.30	U	80.0	71.0		ug/L		89	20 - 160	2	20
2,4,5-Trichlorophenol	0.28	U	80.0	70.3		ug/L		88	20 - 160	2	20
2,4-Dinitrotoluene	1.0	U	80.0	82.1		ug/L		103	70 - 130	2	20
4-Nitrophenol	0.69	U	160	48.1		ug/L		30	20 - 160	1	20
4,6-Dinitro-2-methylphenol	13	U	160	168		ug/L		105	20 - 160	5	20
Pentachlorophenol	1.4	U	160	128		ug/L		80	20 - 160	7	20
Bis(2-chloroethyl)ether	0.30	U	80.0	69.8		ug/L		87	70 - 130	0	20
N-Nitrosodi-n-propylamine	0.43	U	80.0	70.7		ug/L		88	70 - 130	3	20
Hexachloroethane	1.2	U	80.0	56.0		ug/L		70	20 - 160	8	20
Nitrobenzene	0.57	U	80.0	72.9		ug/L		91	70 - 130	6	20
Isophorone	0.80	U	80.0	77.0		ug/L		96	70 - 130	3	20
Naphthalene	1.1	U	80.0	71.0		ug/L		89	70 - 130	4	20
4-Chloroaniline	1.9	U	80.0	63.5		ug/L		79	20 - 160	4	20
Hexachlorobutadiene	0.78	U	80.0	62.4		ug/L		78	70 - 130	7	20
2-Methylnaphthalene	1.1	U	80.0	72.0		ug/L		90	70 - 130	4	20
Hexachlorocyclopentadiene	1.7	U	80.0	58.1		ug/L		73	20 - 160	9	20
2-Chloronaphthalene	1.2	U	80.0	75.2		ug/L		94	70 - 130	5	20
2-Nitroaniline	0.47	U	80.0	75.8		ug/L		95	20 - 160	3	20
Dimethyl phthalate	0.77	U	80.0	79.0		ug/L		99	70 - 130	1	20

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

Lab Sample ID: 460-163149-2 MSD
Matrix: Water
Analysis Batch: 547427

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 547339

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	0.82	U	80.0	81.3		ug/L		102	70 - 130	4	20
2,6-Dinitrotoluene	0.39	U	80.0	81.0		ug/L		101	70 - 130	2	20
3-Nitroaniline	0.96	U	80.0	61.6		ug/L		77	20 - 160	2	20
Acenaphthene	1.1	U	80.0	69.2		ug/L		86	70 - 130	5	20
Dibenzofuran	1.1	U	80.0	76.6		ug/L		96	70 - 130	3	20
2,4-Dinitrophenol	14	U	160	129		ug/L		81	20 - 160	7	20
Diethyl phthalate	0.98	U	80.0	80.4		ug/L		100	70 - 130	2	20
4-Chlorophenyl phenyl ether	1.3	U	80.0	76.9		ug/L		96	70 - 130	1	20
Fluorene	0.91	U	80.0	76.0		ug/L		95	70 - 130	0	20
4-Nitroaniline	0.54	U	80.0	74.2		ug/L		93	20 - 160	5	20
N-Nitrosodiphenylamine	0.89	U	80.0	80.6		ug/L		101	70 - 130	2	20
4-Bromophenyl phenyl ether	0.75	U	80.0	81.9		ug/L		102	70 - 130	2	20
Hexachlorobenzene	0.40	U	80.0	82.0		ug/L		102	70 - 130	3	20
Phenanthrene	0.58	U	80.0	79.8		ug/L		100	70 - 130	1	20
Anthracene	0.63	U	80.0	80.2		ug/L		100	70 - 130	0	20
Carbazole	0.68	U	80.0	80.2		ug/L		100	70 - 130	1	20
Di-n-butyl phthalate	0.84	U	80.0	85.8		ug/L		107	70 - 130	1	20
Fluoranthene	0.84	U	80.0	81.8		ug/L		102	70 - 130	2	20
Pyrene	1.6	U	80.0	84.5		ug/L		106	70 - 130	3	20
Butyl benzyl phthalate	0.85	U	80.0	89.8		ug/L		112	70 - 130	3	20
Benzo[a]anthracene	0.59	U	80.0	83.5		ug/L		104	70 - 130	3	20
Chrysene	0.91	U	80.0	84.2		ug/L		105	70 - 130	2	20
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	86.7		ug/L		108	70 - 130	0	20
Di-n-octyl phthalate	4.8	U	80.0	88.4		ug/L		110	70 - 130	2	20
Benzo[b]fluoranthene	1.1	U	80.0	85.6		ug/L		107	70 - 130	3	20
Benzo[k]fluoranthene	0.67	U	80.0	92.5		ug/L		116	70 - 130	4	20
Benzo[a]pyrene	0.41	U	80.0	86.8		ug/L		108	70 - 130	2	20
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	92.8		ug/L		116	70 - 130	1	20
Dibenz(a,h)anthracene	0.72	U	80.0	95.7		ug/L		120	70 - 130	3	20
Benzo[g,h,i]perylene	1.4	U	80.0	91.2		ug/L		114	70 - 130	5	20
1,1'-Biphenyl	1.2	U	80.0	76.5		ug/L		96	70 - 130	4	20
Acetophenone	0.79	U	80.0	70.4		ug/L		88	70 - 130	2	20
Benzaldehyde	0.59	U	160	148		ug/L		92	20 - 160	5	20
Caprolactam	0.68	U F1	160	31.6		ug/L		20	20 - 160	6	20
Atrazine	1.3	U	160	176		ug/L		110	70 - 130	2	20
2,2'-oxybis[1-chloropropane]	0.63	U	80.0	69.9		ug/L		87	70 - 130	2	20
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	73.1		ug/L		91	70 - 130	6	20
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	73.8		ug/L		92	70 - 130	1	20
3,3'-Dichlorobenzidine	1.4	U	80.0	73.5		ug/L		92	70 - 130	4	20
Bis(2-chloroethoxy)methane	0.24	U	80.0	76.5		ug/L		96	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*89*		*30 - 130*
Phenol-d5 (Surr)	*23*		*15 - 110*
Terphenyl-d14 (Surr)	*90*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*99*		*15 - 110*
2-Fluorophenol (Surr)	*39*		*15 - 110*
2-Fluorobiphenyl	*92*		*30 - 130*

Lab Sample ID: MB 460-547376/1-A
Matrix: Water
Analysis Batch: 547472

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:11	08/25/18 21:12	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:11	08/25/18 21:12	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/25/18 10:11	08/25/18 21:12	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/25/18 21:12	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/25/18 21:12	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/25/18 21:12	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:11	08/25/18 21:12	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:11	08/25/18 21:12	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:11	08/25/18 21:12	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:11	08/25/18 21:12	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:11	08/25/18 21:12	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:11	08/25/18 21:12	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:11	08/25/18 21:12	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		08/25/18 10:11	08/25/18 21:12	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		08/25/18 10:11	08/25/18 21:12	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:11	08/25/18 21:12	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:11	08/25/18 21:12	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:11	08/25/18 21:12	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:11	08/25/18 21:12	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/25/18 21:12	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:11	08/25/18 21:12	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:11	08/25/18 21:12	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/25/18 21:12	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:11	08/25/18 21:12	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/25/18 21:12	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:11	08/25/18 21:12	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:11	08/25/18 21:12	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:11	08/25/18 21:12	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:11	08/25/18 21:12	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:11	08/25/18 21:12	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/25/18 21:12	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:11	08/25/18 21:12	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:11	08/25/18 21:12	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:11	08/25/18 21:12	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:11	08/25/18 21:12	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:11	08/25/18 21:12	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:11	08/25/18 21:12	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:11	08/25/18 21:12	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/25/18 21:12	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		08/25/18 10:11	08/25/18 21:12	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:11	08/25/18 21:12	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:11	08/25/18 21:12	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:11	08/25/18 21:12	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:11	08/25/18 21:12	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:11	08/25/18 21:12	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:11	08/25/18 21:12	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:11	08/25/18 21:12	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		08/25/18 10:11	08/25/18 21:12	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:11	08/25/18 21:12	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:11	08/25/18 21:12	1

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

Lab Sample ID: MB 460-547376/1-A
Matrix: Water
Analysis Batch: 547472

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:11	08/25/18 21:12	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		08/25/18 10:11	08/25/18 21:12	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:11	08/25/18 21:12	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		08/25/18 10:11	08/25/18 21:12	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		08/25/18 10:11	08/25/18 21:12	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		08/25/18 10:11	08/25/18 21:12	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:11	08/25/18 21:12	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/25/18 21:12	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:11	08/25/18 21:12	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 10:11	08/25/18 21:12	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 10:11	08/25/18 21:12	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 10:11	08/25/18 21:12	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:11	08/25/18 21:12	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:11	08/25/18 21:12	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:11	08/25/18 21:12	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:11	08/25/18 21:12	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:11	08/25/18 21:12	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:11*	*08/25/18 21:12*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*103*		*30 - 130*	*08/25/18 10:11*	*08/25/18 21:12*	*1*
Phenol-d5 (Surr)	*24*		*15 - 110*	*08/25/18 10:11*	*08/25/18 21:12*	*1*
Terphenyl-d14 (Surr)	*113*		*30 - 130*	*08/25/18 10:11*	*08/25/18 21:12*	*1*
2,4,6-Tribromophenol (Surr)	*119*	*X*	*15 - 110*	*08/25/18 10:11*	*08/25/18 21:12*	*1*
2-Fluorophenol (Surr)	*39*		*15 - 110*	*08/25/18 10:11*	*08/25/18 21:12*	*1*
2-Fluorobiphenyl	*98*		*30 - 130*	*08/25/18 10:11*	*08/25/18 21:12*	*1*

Lab Sample ID: LCS 460-547376/2-A
Matrix: Water
Analysis Batch: 547472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	80.0	23.8		ug/L		30	20 - 160
2-Chlorophenol	80.0	65.2		ug/L		81	70 - 130
2-Methylphenol	80.0	52.5	*	ug/L		66	70 - 130
4-Methylphenol	80.0	49.7		ug/L		62	20 - 160
2-Nitrophenol	80.0	87.6		ug/L		110	70 - 130
2,4-Dimethylphenol	80.0	70.9		ug/L		89	70 - 130
2,4-Dichlorophenol	80.0	80.4		ug/L		101	70 - 130
4-Chloro-3-methylphenol	80.0	76.3		ug/L		95	20 - 160
2,4,6-Trichlorophenol	80.0	84.7		ug/L		106	70 - 130
2,4,5-Trichlorophenol	80.0	77.3		ug/L		97	20 - 160
2,4-Dinitrotoluene	80.0	92.1		ug/L		115	70 - 130
4-Nitrophenol	160	55.5		ug/L		35	20 - 160
4,6-Dinitro-2-methylphenol	160	164		ug/L		102	20 - 160

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

Lab Sample ID: LCS 460-547376/2-A
Matrix: Water
Analysis Batch: 547472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	160	161		ug/L		101	20 - 160
Bis(2-chloroethyl)ether	80.0	71.1		ug/L		89	70 - 130
N-Nitrosodi-n-propylamine	80.0	83.3		ug/L		104	70 - 130
Hexachloroethane	80.0	64.6		ug/L		81	20 - 160
Nitrobenzene	80.0	81.1		ug/L		101	70 - 130
Isophorone	80.0	83.8		ug/L		105	70 - 130
Naphthalene	80.0	76.4		ug/L		95	70 - 130
4-Chloroaniline	80.0	67.1		ug/L		84	20 - 160
Hexachlorobutadiene	80.0	75.6		ug/L		95	70 - 130
2-Methylnaphthalene	80.0	80.2		ug/L		100	70 - 130
Hexachlorocyclopentadiene	80.0	81.1		ug/L		101	20 - 160
2-Chloronaphthalene	80.0	78.1		ug/L		98	70 - 130
2-Nitroaniline	80.0	89.0		ug/L		111	20 - 160
Dimethyl phthalate	80.0	86.5		ug/L		108	70 - 130
Acenaphthylene	80.0	86.0		ug/L		107	70 - 130
2,6-Dinitrotoluene	80.0	88.6		ug/L		111	70 - 130
3-Nitroaniline	80.0	65.8		ug/L		82	20 - 160
Acenaphthene	80.0	75.8		ug/L		95	70 - 130
Dibenzofuran	80.0	84.6		ug/L		106	70 - 130
2,4-Dinitrophenol	160	157		ug/L		98	20 - 160
Diethyl phthalate	80.0	87.2		ug/L		109	70 - 130
4-Chlorophenyl phenyl ether	80.0	93.7		ug/L		117	70 - 130
Fluorene	80.0	89.0		ug/L		111	70 - 130
4-Nitroaniline	80.0	71.6		ug/L		89	20 - 160
N-Nitrosodiphenylamine	80.0	86.4		ug/L		108	70 - 130
4-Bromophenyl phenyl ether	80.0	91.1		ug/L		114	70 - 130
Hexachlorobenzene	80.0	94.7		ug/L		118	70 - 130
Phenanthrene	80.0	85.1		ug/L		106	70 - 130
Anthracene	80.0	84.2		ug/L		105	70 - 130
Carbazole	80.0	82.4		ug/L		103	70 - 130
Di-n-butyl phthalate	80.0	90.6		ug/L		113	70 - 130
Fluoranthene	80.0	86.9		ug/L		109	70 - 130
Pyrene	80.0	90.2		ug/L		113	70 - 130
Butyl benzyl phthalate	80.0	90.3		ug/L		113	70 - 130
Benzo[a]anthracene	80.0	88.6		ug/L		111	70 - 130
Chrysene	80.0	90.7		ug/L		113	70 - 130
Bis(2-ethylhexyl) phthalate	80.0	90.9		ug/L		114	70 - 130
Di-n-octyl phthalate	80.0	95.3		ug/L		119	70 - 130
Benzo[b]fluoranthene	80.0	87.3		ug/L		109	70 - 130
Benzo[k]fluoranthene	80.0	86.1		ug/L		108	70 - 130
Benzo[a]pyrene	80.0	88.7		ug/L		111	70 - 130
Indeno[1,2,3-cd]pyrene	80.0	90.7		ug/L		113	70 - 130
Dibenz(a,h)anthracene	80.0	89.5		ug/L		112	70 - 130
Benzo[g,h,i]perylene	80.0	83.9		ug/L		105	70 - 130
1,1'-Biphenyl	80.0	79.5		ug/L		99	70 - 130
Acetophenone	80.0	84.7		ug/L		106	70 - 130
2,2'-oxybis[1-chloropropane]	80.0	66.1		ug/L		83	70 - 130
1,2,4,5-Tetrachlorobenzene	80.0	82.2		ug/L		103	70 - 130

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

Lab Sample ID: LCS 460-547376/2-A
Matrix: Water
Analysis Batch: 547472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,4,6-Tetrachlorophenol	80.0	87.1		ug/L		109	70 - 130
3,3'-Dichlorobenzidine	80.0	80.8		ug/L		101	70 - 130
Bis(2-chloroethoxy)methane	80.0	80.0		ug/L		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*105*		*30 - 130*
Phenol-d5 (Surr)	*25*		*15 - 110*
Terphenyl-d14 (Surr)	*104*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*121*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*39*		*15 - 110*
2-Fluorobiphenyl	*101*		*30 - 130*

Lab Sample ID: LCS 460-547376/3-A
Matrix: Water
Analysis Batch: 547472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	160	138		ug/L		86	20 - 160
Caprolactam	160	27.3	*	ug/L		17	20 - 160
Atrazine	160	175		ug/L		110	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*97*		*30 - 130*
Phenol-d5 (Surr)	*23*		*15 - 110*
Terphenyl-d14 (Surr)	*102*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*105*		*15 - 110*
2-Fluorophenol (Surr)	*38*		*15 - 110*
2-Fluorobiphenyl	*92*		*30 - 130*

Lab Sample ID: 460-163182-E-2-A MS
Matrix: Water
Analysis Batch: 547472

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 547376

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	0.29	U	80.0	24.0		ug/L		30	20 - 160
2-Chlorophenol	0.38	U	80.0	59.2		ug/L		74	70 - 130
2-Methylphenol	0.26	U F1 *	80.0	48.3	F1	ug/L		60	70 - 130
4-Methylphenol	0.24	U	80.0	46.2		ug/L		58	20 - 160
2-Nitrophenol	0.75	U	80.0	79.0		ug/L		99	70 - 130
2,4-Dimethylphenol	0.24	U	80.0	65.4		ug/L		82	70 - 130
2,4-Dichlorophenol	0.42	U	80.0	73.2		ug/L		91	70 - 130
4-Chloro-3-methylphenol	0.58	U	80.0	67.2		ug/L		84	20 - 160
2,4,6-Trichlorophenol	0.30	U	80.0	74.3		ug/L		93	20 - 160
2,4,5-Trichlorophenol	0.28	U	80.0	70.0		ug/L		88	20 - 160
2,4-Dinitrotoluene	1.0	U	80.0	82.0		ug/L		102	70 - 130
4-Nitrophenol	0.69	U	160	56.2		ug/L		35	20 - 160
4,6-Dinitro-2-methylphenol	13	U	160	157		ug/L		98	20 - 160
Pentachlorophenol	1.4	U	160	156		ug/L		98	20 - 160

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

Lab Sample ID: 460-163182-E-2-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547472 — **Prep Batch: 547376**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	0.30	U	80.0	63.3		ug/L		79	70 - 130
N-Nitrosodi-n-propylamine	0.43	U	80.0	73.3		ug/L		92	70 - 130
Hexachloroethane	1.2	U	80.0	61.3		ug/L		77	20 - 160
Nitrobenzene	0.57	U	80.0	73.6		ug/L		92	70 - 130
Isophorone	0.80	U	80.0	75.4		ug/L		94	70 - 130
Naphthalene	37		80.0	106		ug/L		87	70 - 130
4-Chloroaniline	1.9	U	80.0	53.4		ug/L		67	20 - 160
Hexachlorobutadiene	0.78	U	80.0	74.1		ug/L		93	70 - 130
2-Methylnaphthalene	1.1	U	80.0	74.7		ug/L		93	70 - 130
Hexachlorocyclopentadiene	1.7	U	80.0	79.8		ug/L		100	20 - 160
2-Chloronaphthalene	1.2	U	80.0	72.2		ug/L		90	70 - 130
2-Nitroaniline	0.47	U	80.0	77.9		ug/L		97	20 - 160
Dimethyl phthalate	0.77	U	80.0	76.8		ug/L		96	70 - 130
Acenaphthylene	0.82	U	80.0	78.3		ug/L		98	70 - 130
2,6-Dinitrotoluene	0.39	U	80.0	80.9		ug/L		101	70 - 130
3-Nitroaniline	0.96	U	80.0	55.1		ug/L		69	20 - 160
Acenaphthene	7.1	J	80.0	76.7		ug/L		87	70 - 130
Dibenzofuran	1.1	U	80.0	76.6		ug/L		96	70 - 130
2,4-Dinitrophenol	14	U	160	142		ug/L		89	20 - 160
Diethyl phthalate	0.98	U	80.0	77.7		ug/L		97	70 - 130
4-Chlorophenyl phenyl ether	1.3	U	80.0	83.6		ug/L		105	70 - 130
Fluorene	1.6	J	80.0	81.3		ug/L		100	70 - 130
4-Nitroaniline	0.54	U	80.0	62.0		ug/L		78	20 - 160
N-Nitrosodiphenylamine	0.89	U	80.0	77.0		ug/L		96	70 - 130
4-Bromophenyl phenyl ether	0.75	U	80.0	83.3		ug/L		104	70 - 130
Hexachlorobenzene	0.40	U	80.0	86.2		ug/L		108	70 - 130
Phenanthrene	0.58	U	80.0	78.4		ug/L		98	70 - 130
Anthracene	0.63	U	80.0	78.4		ug/L		98	70 - 130
Carbazole	0.68	U	80.0	75.1		ug/L		94	70 - 130
Di-n-butyl phthalate	0.84	U	80.0	83.5		ug/L		104	70 - 130
Fluoranthene	0.84	U	80.0	80.7		ug/L		101	70 - 130
Pyrene	1.6	U	80.0	79.4		ug/L		99	70 - 130
Butyl benzyl phthalate	0.85	U	80.0	84.6		ug/L		106	70 - 130
Benzo[a]anthracene	0.59	U	80.0	83.2		ug/L		104	70 - 130
Chrysene	0.91	U	80.0	79.0		ug/L		99	70 - 130
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	86.8		ug/L		109	70 - 130
Di-n-octyl phthalate	4.8	U	80.0	93.3		ug/L		117	70 - 130
Benzo[b]fluoranthene	1.1	U	80.0	81.3		ug/L		102	70 - 130
Benzo[k]fluoranthene	0.67	U	80.0	83.2		ug/L		104	70 - 130
Benzo[a]pyrene	0.41	U	80.0	83.7		ug/L		105	70 - 130
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	82.8		ug/L		104	70 - 130
Dibenz(a,h)anthracene	0.72	U	80.0	81.9		ug/L		102	70 - 130
Benzo[g,h,i]perylene	1.4	U	80.0	78.2		ug/L		98	70 - 130
1,1'-Biphenyl	1.2	U	80.0	73.3		ug/L		92	70 - 130
Acetophenone	0.79	U	80.0	75.6		ug/L		94	70 - 130
Benzaldehyde	0.59	U	160	128		ug/L		80	20 - 160
Caprolactam	0.68	U F1 *	160	28.0	F1	ug/L		18	20 - 160
Atrazine	1.3	U	160	159		ug/L		99	70 - 130

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

Lab Sample ID: 460-163182-E-2-A MS
Matrix: Water
Analysis Batch: 547472

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 547376

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2'-oxybis[1-chloropropane]	0.63	U	80.0	59.2		ug/L		74	70 - 130
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	76.7		ug/L		96	70 - 130
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	75.9		ug/L		95	70 - 130
3,3'-Dichlorobenzidine	1.4	U F2 F1	80.0	47.1	F1	ug/L		59	70 - 130
Bis(2-chloroethoxy)methane	0.24	U	80.0	72.7		ug/L		91	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*96*		*30 - 130*
Phenol-d5 (Surr)	*26*		*15 - 110*
Terphenyl-d14 (Surr)	*83*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*107*		*15 - 110*
2-Fluorophenol (Surr)	*40*		*15 - 110*
2-Fluorobiphenyl	*94*		*30 - 130*

Lab Sample ID: 460-163182-E-2-B MSD
Matrix: Water
Analysis Batch: 547472

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 547376

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	0.29	U	80.0	27.0		ug/L		34	20 - 160	12	20
2-Chlorophenol	0.38	U	80.0	62.1		ug/L		78	70 - 130	5	20
2-Methylphenol	0.26	U F1 *	80.0	52.0	F1	ug/L		65	70 - 130	7	20
4-Methylphenol	0.24	U	80.0	50.5		ug/L		63	20 - 160	9	20
2-Nitrophenol	0.75	U	80.0	78.7		ug/L		98	70 - 130	0	20
2,4-Dimethylphenol	0.24	U	80.0	67.8		ug/L		85	70 - 130	4	20
2,4-Dichlorophenol	0.42	U	80.0	74.8		ug/L		93	70 - 130	2	20
4-Chloro-3-methylphenol	0.58	U	80.0	71.3		ug/L		89	20 - 160	6	20
2,4,6-Trichlorophenol	0.30	U	80.0	74.4		ug/L		93	20 - 160	0	20
2,4,5-Trichlorophenol	0.28	U	80.0	69.7		ug/L		87	20 - 160	0	20
2,4-Dinitrotoluene	1.0	U	80.0	85.6		ug/L		107	70 - 130	4	20
4-Nitrophenol	0.69	U	160	60.4		ug/L		38	20 - 160	7	20
4,6-Dinitro-2-methylphenol	13	U	160	160		ug/L		100	20 - 160	2	20
Pentachlorophenol	1.4	U	160	151		ug/L		95	20 - 160	3	20
Bis(2-chloroethyl)ether	0.30	U	80.0	65.1		ug/L		81	70 - 130	3	20
N-Nitrosodi-n-propylamine	0.43	U	80.0	76.9		ug/L		96	70 - 130	5	20
Hexachloroethane	1.2	U	80.0	61.0		ug/L		76	20 - 160	1	20
Nitrobenzene	0.57	U	80.0	75.8		ug/L		95	70 - 130	3	20
Isophorone	0.80	U	80.0	76.2		ug/L		95	70 - 130	1	20
Naphthalene	37		80.0	104		ug/L		84	70 - 130	2	20
4-Chloroaniline	1.9	U	80.0	60.5		ug/L		76	20 - 160	13	20
Hexachlorobutadiene	0.78	U	80.0	70.8		ug/L		89	70 - 130	5	20
2-Methylnaphthalene	1.1	U	80.0	75.3		ug/L		94	70 - 130	1	20
Hexachlorocyclopentadiene	1.7	U	80.0	77.1		ug/L		96	20 - 160	3	20
2-Chloronaphthalene	1.2	U	80.0	72.7		ug/L		91	70 - 130	1	20
2-Nitroaniline	0.47	U	80.0	83.7		ug/L		105	20 - 160	7	20
Dimethyl phthalate	0.77	U	80.0	78.8		ug/L		99	70 - 130	3	20
Acenaphthylene	0.82	U	80.0	79.4		ug/L		99	70 - 130	1	20
2,6-Dinitrotoluene	0.39	U	80.0	83.2		ug/L		104	70 - 130	3	20

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

Lab Sample ID: 460-163182-E-2-B MSD
Matrix: Water
Analysis Batch: 547472

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 547376

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3-Nitroaniline	0.96	U	80.0	59.5		ug/L		74	20 - 160	8	20
Acenaphthene	7.1	J	80.0	76.3		ug/L		86	70 - 130	1	20
Dibenzofuran	1.1	U	80.0	78.1		ug/L		98	70 - 130	2	20
2,4-Dinitrophenol	14	U	160	148		ug/L		92	20 - 160	4	20
Diethyl phthalate	0.98	U	80.0	78.8		ug/L		99	70 - 130	1	20
4-Chlorophenyl phenyl ether	1.3	U	80.0	85.4		ug/L		107	70 - 130	2	20
Fluorene	1.6	J	80.0	84.1		ug/L		103	70 - 130	3	20
4-Nitroaniline	0.54	U	80.0	66.7		ug/L		83	20 - 160	7	20
N-Nitrosodiphenylamine	0.89	U	80.0	77.9		ug/L		97	70 - 130	1	20
4-Bromophenyl phenyl ether	0.75	U	80.0	83.4		ug/L		104	70 - 130	0	20
Hexachlorobenzene	0.40	U	80.0	86.4		ug/L		108	70 - 130	0	20
Phenanthrene	0.58	U	80.0	79.3		ug/L		99	70 - 130	1	20
Anthracene	0.63	U	80.0	78.3		ug/L		98	70 - 130	0	20
Carbazole	0.68	U	80.0	75.6		ug/L		94	70 - 130	1	20
Di-n-butyl phthalate	0.84	U	80.0	82.2		ug/L		103	70 - 130	1	20
Fluoranthene	0.84	U	80.0	78.3		ug/L		98	70 - 130	3	20
Pyrene	1.6	U	80.0	80.2		ug/L		100	70 - 130	1	20
Butyl benzyl phthalate	0.85	U	80.0	84.0		ug/L		105	70 - 130	1	20
Benzo[a]anthracene	0.59	U	80.0	80.1		ug/L		100	70 - 130	4	20
Chrysene	0.91	U	80.0	83.0		ug/L		104	70 - 130	5	20
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	86.0		ug/L		107	70 - 130	1	20
Di-n-octyl phthalate	4.8	U	80.0	88.6		ug/L		111	70 - 130	5	20
Benzo[b]fluoranthene	1.1	U	80.0	82.4		ug/L		103	70 - 130	1	20
Benzo[k]fluoranthene	0.67	U	80.0	80.0		ug/L		100	70 - 130	4	20
Benzo[a]pyrene	0.41	U	80.0	83.6		ug/L		104	70 - 130	0	20
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	85.0		ug/L		106	70 - 130	3	20
Dibenz(a,h)anthracene	0.72	U	80.0	84.0		ug/L		105	70 - 130	3	20
Benzo[g,h,i]perylene	1.4	U	80.0	80.5		ug/L		101	70 - 130	3	20
1,1'-Biphenyl	1.2	U	80.0	73.9		ug/L		92	70 - 130	1	20
Acetophenone	0.79	U	80.0	79.9		ug/L		100	70 - 130	6	20
Benzaldehyde	0.59	U	160	129		ug/L		80	20 - 160	0	20
Caprolactam	0.68	U F1 *	160	32.6		ug/L		20	20 - 160	15	20
Atrazine	1.3	U	160	161		ug/L		101	70 - 130	2	20
2,2'-oxybis[1-chloropropane]	0.63	U	80.0	60.9		ug/L		76	70 - 130	3	20
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	76.0		ug/L		95	70 - 130	1	20
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	79.7		ug/L		100	70 - 130	5	20
3,3'-Dichlorobenzidine	1.4	U F2 F1	80.0	60.8	F2	ug/L		76	70 - 130	26	20
Bis(2-chloroethoxy)methane	0.24	U	80.0	72.4		ug/L		91	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*92*		*30 - 130*
Phenol-d5 (Surr)	*28*		*15 - 110*
Terphenyl-d14 (Surr)	*82*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*108*		*15 - 110*
2-Fluorophenol (Surr)	*42*		*15 - 110*
2-Fluorobiphenyl	*91*		*30 - 130*

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

Lab Sample ID: MB 460-547339/1-A
Matrix: Water
Analysis Batch: 547693

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547339

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 07:09	08/27/18 19:55	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 07:09	08/27/18 19:55	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 07:09	08/27/18 19:55	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 07:09	08/27/18 19:55	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 07:09	08/27/18 19:55	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 07:09	08/27/18 19:55	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 07:09	08/27/18 19:55	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 07:09	08/27/18 19:55	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 07:09	08/27/18 19:55	1

Lab Sample ID: LCS 460-547339/4-A
Matrix: Water
Analysis Batch: 547560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.680		ug/L		85	70 - 130
Benzo[a]pyrene	0.800	0.753		ug/L		94	70 - 130
Benzo[b]fluoranthene	0.800	0.701		ug/L		88	70 - 130
Bis(2-chloroethyl)ether	0.800	0.848		ug/L		106	70 - 130
Dibenz(a,h)anthracene	0.800	1.14	*	ug/L		143	70 - 130
Hexachlorobenzene	0.800	0.731		ug/L		91	70 - 130
Indeno[1,2,3-cd]pyrene	0.800	0.949		ug/L		119	70 - 130
N-Nitrosodimethylamine	0.800	0.576		ug/L		72	20 - 160
Pentachlorophenol	1.60	1.61		ug/L		101	20 - 160

Lab Sample ID: LCSD 460-547339/5-A
Matrix: Water
Analysis Batch: 547560

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 547339

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.607		ug/L		76	70 - 130	11	20
Benzo[a]pyrene	0.800	0.626		ug/L		78	70 - 130	18	20
Benzo[b]fluoranthene	0.800	0.656		ug/L		82	70 - 130	7	20
Bis(2-chloroethyl)ether	0.800	0.778		ug/L		97	70 - 130	9	20
Dibenz(a,h)anthracene	0.800	0.991		ug/L		124	70 - 130	14	20
Hexachlorobenzene	0.800	0.671		ug/L		84	70 - 130	8	20
Indeno[1,2,3-cd]pyrene	0.800	0.814		ug/L		102	70 - 130	15	20
N-Nitrosodimethylamine	0.800	0.532		ug/L		67	20 - 160	8	20
Pentachlorophenol	1.60	1.31	*	ug/L		82	20 - 160	21	20

Lab Sample ID: MB 460-547376/1-A
Matrix: Water
Analysis Batch: 547488

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:11	08/26/18 01:47	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:11	08/26/18 01:47	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:11	08/26/18 01:47	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:11	08/26/18 01:47	1

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

Lab Sample ID: MB 460-547376/1-A
Matrix: Water
Analysis Batch: 547488

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:11	08/26/18 01:47	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 10:11	08/26/18 01:47	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:11	08/26/18 01:47	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:11	08/26/18 01:47	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:11	08/26/18 01:47	1

Lab Sample ID: LCS 460-547376/4-A
Matrix: Water
Analysis Batch: 547488

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.774		ug/L		97	70 - 130
Benzo[a]pyrene	0.800	0.897		ug/L		112	70 - 130
Benzo[b]fluoranthene	0.800	0.847		ug/L		106	70 - 130
Bis(2-chloroethyl)ether	0.800	0.858		ug/L		107	70 - 130
Dibenz(a,h)anthracene	0.800	0.933		ug/L		117	70 - 130
Hexachlorobenzene	0.800	1.06	*	ug/L		133	70 - 130
Indeno[1,2,3-cd]pyrene	0.800	0.705		ug/L		88	70 - 130
N-Nitrosodimethylamine	0.800	0.458		ug/L		57	20 - 160
Pentachlorophenol	1.60	1.21		ug/L		75	20 - 160

Lab Sample ID: LCSD 460-547376/5-A
Matrix: Water
Analysis Batch: 547488

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 547376

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.791		ug/L		99	70 - 130	2	20
Benzo[a]pyrene	0.800	0.884		ug/L		111	70 - 130	1	20
Benzo[b]fluoranthene	0.800	0.893		ug/L		112	70 - 130	5	20
Bis(2-chloroethyl)ether	0.800	0.828		ug/L		104	70 - 130	4	20
Dibenz(a,h)anthracene	0.800	0.991		ug/L		124	70 - 130	6	20
Hexachlorobenzene	0.800	1.06	*	ug/L		133	70 - 130	0	20
Indeno[1,2,3-cd]pyrene	0.800	0.757		ug/L		95	70 - 130	7	20
N-Nitrosodimethylamine	0.800	0.448		ug/L		56	20 - 160	2	20
Pentachlorophenol	1.60	1.19		ug/L		74	20 - 160	1	20

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 460-547073/1-A
Matrix: Water
Analysis Batch: 547155

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547073

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/24/18 09:07	08/24/18 13:46	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/24/18 09:07*	*08/24/18 13:46*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: LCS 460-547073/2-A
Matrix: Water
Analysis Batch: 547155

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547073

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			1.60	1.88		ug/L		118	10 - 200		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*34*		*10 - 200*

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547155

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 547073

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	0.016	U	1.60	1.89		ug/L		118	70 - 130		

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*39*		*10 - 150*

Lab Sample ID: 460-163149-2 MSD
Matrix: Water
Analysis Batch: 547155

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 547073

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.016	U	1.60	1.81		ug/L		113	70 - 130	4	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*45*		*10 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 460-547236/1-A
Matrix: Water
Analysis Batch: 547439

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547236

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 21:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*30 - 150*	*08/24/18 18:58*	*08/25/18 21:34*	*1*
Tetrachloro-m-xylene	*75*		*30 - 150*	*08/24/18 18:58*	*08/25/18 21:34*	*1*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*08/24/18 18:58*	*08/25/18 21:34*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 460-547236/1-A
Matrix: Water
Analysis Batch: 547439

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547236

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	86		30 - 150	08/24/18 18:58	08/25/18 21:34	1

Lab Sample ID: LCS 460-547236/2-A
Matrix: Water
Analysis Batch: 547439

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547236

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.22		ug/L		81	40 - 140
PCB-1016	4.00	3.28		ug/L		82	40 - 140
PCB-1260	4.00	3.50		ug/L		87	40 - 140
PCB-1260	4.00	3.60		ug/L		90	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	73		30 - 150
Tetrachloro-m-xylene	72		30 - 150
DCB Decachlorobiphenyl	82		30 - 150
DCB Decachlorobiphenyl	82		30 - 150

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547439

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 547236

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.12	U	4.08	2.83		ug/L		69	40 - 140
PCB-1016	0.12	U	4.08	2.93		ug/L		72	40 - 140
PCB-1260	0.11	U	4.08	3.11		ug/L		76	40 - 140
PCB-1260	0.11	U	4.08	3.29		ug/L		81	40 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	61		30 - 150
Tetrachloro-m-xylene	61		30 - 150
DCB Decachlorobiphenyl	70		30 - 150
DCB Decachlorobiphenyl	72		30 - 150

Lab Sample ID: 460-163149-2 MSD
Matrix: Water
Analysis Batch: 547439

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 547236

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.12	U	4.08	2.92		ug/L		71	40 - 140	3	20
PCB-1016	0.12	U	4.08	3.18		ug/L		78	40 - 140	8	20
PCB-1260	0.11	U	4.08	3.21		ug/L		79	40 - 140	3	20
PCB-1260	0.11	U	4.08	3.47		ug/L		85	40 - 140	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	63		30 - 150
Tetrachloro-m-xylene	65		30 - 150

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 460-163149-2 MSD
Matrix: Water
Analysis Batch: 547439

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 547236

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*72*		*30 - 150*
DCB Decachlorobiphenyl	*76*		*30 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 460-547536/3
Matrix: Water
Analysis Batch: 547536

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/26/18 09:56	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/26/18 09:56	1

Lab Sample ID: LCS 460-547536/5
Matrix: Water
Analysis Batch: 547536

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.521		mg/L		101	90 - 110
Sulfate	7.50	7.571		mg/L		101	90 - 110

Lab Sample ID: LCSD 460-547536/6
Matrix: Water
Analysis Batch: 547536

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.50	1.652		mg/L		110	90 - 110	8	15
Sulfate	7.50	8.219		mg/L		110	90 - 110	8	15

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547536

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	9.75		7.50	16.75		mg/L		93	90 - 110

Lab Sample ID: 460-163149-2 MSD
Matrix: Water
Analysis Batch: 547536

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	9.75		7.50	17.34		mg/L		101	90 - 110	3	15

Lab Sample ID: 460-163149-6 MS
Matrix: Water
Analysis Batch: 547536

Client Sample ID: OB-18-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.58	F1	1.50	3.118		mg/L		102	90 - 110

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 460-163149-6 MS
Matrix: Water
Analysis Batch: 547536

Client Sample ID: OB-18-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	9.85		7.50	17.36		mg/L		100	90 - 110

Lab Sample ID: 460-163149-6 MSD
Matrix: Water
Analysis Batch: 547536

Client Sample ID: OB-18-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.58	F1	1.50	3.266	F1	mg/L		112	90 - 110	5	15
Sulfate	9.85		7.50	17.54		mg/L		103	90 - 110	1	15

Lab Sample ID: 460-163149-2 DU
Matrix: Water
Analysis Batch: 547536

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	9.75		9.745		mg/L		0.09	15

Lab Sample ID: 460-163149-6 DU
Matrix: Water
Analysis Batch: 547536

Client Sample ID: OB-18-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	1.58	F1	1.628		mg/L		3	15
Sulfate	9.85		9.675		mg/L		2	15

Lab Sample ID: MB 460-547688/3
Matrix: Water
Analysis Batch: 547688

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/27/18 04:08	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/27/18 04:08	1

Lab Sample ID: LCS 460-547688/5
Matrix: Water
Analysis Batch: 547688

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.457		mg/L		97	90 - 110
Sulfate	7.50	7.537		mg/L		100	90 - 110

Lab Sample ID: LCSD 460-547688/6
Matrix: Water
Analysis Batch: 547688

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.50	1.456		mg/L		97	90 - 110	0	15
Sulfate	7.50	7.498		mg/L		100	90 - 110	1	15

Method: 9056A - Anions, Ion Chromatography - DL

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547688

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL	21.3	D	1.50	21.73	4	mg/L		28	90 - 110

Lab Sample ID: 460-163149-2 MSD
Matrix: Water
Analysis Batch: 547688

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride - DL	21.3	D	1.50	21.94	4	mg/L		42	90 - 110	1	15

Lab Sample ID: 460-163149-2 DU
Matrix: Water
Analysis Batch: 547688

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	21.3	D	21.14		mg/L		0.8	15
Sulfate - DL	10.8	F1 D	10.64		mg/L		2	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: LCS 460-547300/2-A
Matrix: Water
Analysis Batch: 547435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547300

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.00	4.73		ug/L		95	80 - 120
Arsenic	10.0	9.98		ug/L		100	80 - 120
Beryllium	5.00	5.18		ug/L		104	80 - 120
Cadmium	5.00	4.86		ug/L		97	80 - 120
Cobalt	5.00	4.70		ug/L		94	80 - 120
Chromium	10.0	9.54		ug/L		95	80 - 120
Copper	10.0	9.54		ug/L		95	80 - 120
Manganese	50.0	49.78		ug/L		100	80 - 120
Nickel	10.0	9.50		ug/L		95	80 - 120
Lead	5.00	4.94		ug/L		99	80 - 120
Antimony	5.00	4.48		ug/L		90	80 - 120
Selenium	10.0	9.79		ug/L		98	80 - 120
Vanadium	10.0	9.82		ug/L		98	80 - 120
Zinc	50.0	48.52		ug/L		97	80 - 120
Aluminum	500	496.9		ug/L		99	80 - 120
Sodium	500	504.2		ug/L		101	80 - 120
Magnesium	500	492.0		ug/L		98	80 - 120
Potassium	500	525.4		ug/L		105	80 - 120
Calcium	500	547.3		ug/L		109	80 - 120
Iron	500	484.1		ug/L		97	80 - 120
Thallium	4.00	3.95		ug/L		99	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-547300/2-A
Matrix: Water
Analysis Batch: 547983

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547300

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	10.0	9.13		ug/L		91	80 - 120

Lab Sample ID: LCS 460-547720/2-A
Matrix: Water
Analysis Batch: 547812

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547720

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.00	5.02		ug/L		100	80 - 120
Arsenic	10.0	10.90		ug/L		109	80 - 120
Barium	10.0	9.75		ug/L		97	80 - 120
Beryllium	5.00	5.04		ug/L		101	80 - 120
Cadmium	5.00	4.83		ug/L		97	80 - 120
Cobalt	5.00	4.88		ug/L		98	80 - 120
Chromium	10.0	9.46		ug/L		95	80 - 120
Copper	10.0	9.20		ug/L		92	80 - 120
Manganese	50.0	49.84		ug/L		100	80 - 120
Nickel	10.0	9.86		ug/L		99	80 - 120
Lead	5.00	4.99		ug/L		100	80 - 120
Antimony	5.00	4.46		ug/L		89	80 - 120
Selenium	10.0	10.55		ug/L		106	80 - 120
Vanadium	10.0	9.57		ug/L		96	80 - 120
Zinc	50.0	50.96		ug/L		102	80 - 120
Aluminum	500	490.8		ug/L		98	80 - 120
Sodium	500	447.3		ug/L		89	80 - 120
Magnesium	500	474.4		ug/L		95	80 - 120
Potassium	500	502.7		ug/L		101	80 - 120
Calcium	500	522.0		ug/L		104	80 - 120
Iron	500	494.7		ug/L		99	80 - 120
Thallium	4.00	3.89		ug/L		97	80 - 120

Lab Sample ID: MB 460-548003/1-A ^2
Matrix: Water
Analysis Batch: 548089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548003

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/28/18 08:49	08/28/18 15:23	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/28/18 08:49	08/28/18 15:23	2
Barium	1.1	U	4.0	1.1	ug/L		08/28/18 08:49	08/28/18 15:23	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/28/18 08:49	08/28/18 15:23	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/28/18 08:49	08/28/18 15:23	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/28/18 08:49	08/28/18 15:23	2
Chromium	1.3	U	4.0	1.3	ug/L		08/28/18 08:49	08/28/18 15:23	2
Copper	1.9	U	4.0	1.9	ug/L		08/28/18 08:49	08/28/18 15:23	2
Manganese	2.7	U	8.0	2.7	ug/L		08/28/18 08:49	08/28/18 15:23	2
Nickel	1.3	U	4.0	1.3	ug/L		08/28/18 08:49	08/28/18 15:23	2
Lead	0.37	U	1.2	0.37	ug/L		08/28/18 08:49	08/28/18 15:23	2
Antimony	0.786	J	2.0	0.62	ug/L		08/28/18 08:49	08/28/18 15:23	2
Selenium	0.69	U	10.0	0.69	ug/L		08/28/18 08:49	08/28/18 15:23	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-548003/1-A ^2
Matrix: Water
Analysis Batch: 548089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548003

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	1.2	U	4.0	1.2	ug/L		08/28/18 08:49	08/28/18 15:23	2
Zinc	5.4	U	16.0	5.4	ug/L		08/28/18 08:49	08/28/18 15:23	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/28/18 08:49	08/28/18 15:23	2
Sodium	75.7	U	200	75.7	ug/L		08/28/18 08:49	08/28/18 15:23	2
Magnesium	65.7	U	200	65.7	ug/L		08/28/18 08:49	08/28/18 15:23	2
Potassium	64.9	U	200	64.9	ug/L		08/28/18 08:49	08/28/18 15:23	2
Calcium	67.6	U	200	67.6	ug/L		08/28/18 08:49	08/28/18 15:23	2
Iron	45.7	U	120	45.7	ug/L		08/28/18 08:49	08/28/18 15:23	2
Thallium	0.24	U	0.80	0.24	ug/L		08/28/18 08:49	08/28/18 15:23	2

Lab Sample ID: LCS 460-548003/2-A ^2
Matrix: Water
Analysis Batch: 548089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548003

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	25.95		ug/L		104	80 - 120
Arsenic	50.0	57.04		ug/L		114	80 - 120
Barium	50.0	48.85		ug/L		98	80 - 120
Beryllium	25.0	25.49		ug/L		102	80 - 120
Cadmium	25.0	24.87		ug/L		99	80 - 120
Cobalt	25.0	25.52		ug/L		102	80 - 120
Chromium	50.0	50.45		ug/L		101	80 - 120
Copper	50.0	50.39		ug/L		101	80 - 120
Manganese	250	253.7		ug/L		101	80 - 120
Nickel	50.0	50.44		ug/L		101	80 - 120
Lead	25.0	25.04		ug/L		100	80 - 120
Antimony	25.0	25.66		ug/L		103	80 - 120
Selenium	50.0	56.30		ug/L		113	80 - 120
Vanadium	50.0	50.03		ug/L		100	80 - 120
Zinc	250	247.6		ug/L		99	80 - 120
Aluminum	2500	2501		ug/L		100	80 - 120
Sodium	2500	2662		ug/L		106	80 - 120
Magnesium	2500	2651		ug/L		106	80 - 120
Potassium	2500	2472		ug/L		99	80 - 120
Calcium	2500	2605		ug/L		104	80 - 120
Iron	2500	2527		ug/L		101	80 - 120
Thallium	20.0	19.87		ug/L		99	80 - 120

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 548089

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 548003

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	25.0	26.47		ug/L		106	75 - 125
Arsenic	0.77	U	50.0	46.33		ug/L		93	75 - 125
Barium	17.2		50.0	67.26		ug/L		100	75 - 125
Beryllium	0.26	U	25.0	26.65		ug/L		107	75 - 125
Cadmium	0.61	U	25.0	25.39		ug/L		102	75 - 125
Cobalt	2.8	J	25.0	28.76		ug/L		104	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 548089

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 548003

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	1.3	U	50.0	51.97		ug/L		104	75 - 125
Copper	3.6	J	50.0	54.77		ug/L		102	75 - 125
Manganese	2600		250	2912	4	ug/L		125	75 - 125
Nickel	2.1	J	50.0	53.01		ug/L		102	75 - 125
Lead	0.37	U	25.0	26.19		ug/L		105	75 - 125
Antimony	0.98	J B	25.0	26.27		ug/L		101	75 - 125
Selenium	0.69	U	50.0	45.77		ug/L		92	75 - 125
Vanadium	1.2	U	50.0	52.01		ug/L		104	75 - 125
Zinc	5.4	U	250	247.8		ug/L		99	75 - 125
Aluminum	15.0	U	2500	2567		ug/L		103	75 - 125
Sodium	10700		2500	13480	4	ug/L		113	75 - 125
Magnesium	29200		2500	32310	4	ug/L		123	75 - 125
Potassium	2900		2500	5474		ug/L		103	75 - 125
Calcium	70600		2500	74400	4	ug/L		152	75 - 125
Iron	1810		2500	4267		ug/L		98	75 - 125
Thallium	0.24	U	20.0	20.97		ug/L		105	75 - 125

Lab Sample ID: 460-163149-2 DU
Matrix: Water
Analysis Batch: 548089

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 548003

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	0.77	U	0.77	U	ug/L		NC	20
Barium	17.2		17.02		ug/L		1	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	2.8	J	2.79	J	ug/L		1	20
Chromium	1.3	U	1.3	U	ug/L		NC	20
Copper	3.6	J	3.69	J	ug/L		2	20
Manganese	2600		2610		ug/L		0.4	20
Nickel	2.1	J	1.89	J	ug/L		9	20
Lead	0.37	U	0.37	U	ug/L		NC	20
Antimony	0.98	J B	0.734	J F5	ug/L		28	20
Selenium	0.69	U	0.69	U	ug/L		NC	20
Vanadium	1.2	U	1.2	U	ug/L		NC	20
Zinc	5.4	U	5.4	U	ug/L		NC	20
Aluminum	15.0	U	15.0	U	ug/L		NC	20
Sodium	10700		10730		ug/L		0.6	20
Magnesium	29200		29490		ug/L		0.8	20
Potassium	2900		2919		ug/L		0.7	20
Calcium	70600		70440		ug/L		0.2	20
Iron	1810		1812		ug/L		0.2	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-547291/1-B
Matrix: Water
Analysis Batch: 547435

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 547300

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.68	U	1.0	0.68	ug/L		08/25/18 00:02	08/25/18 03:30	1
Arsenic	0.38	U	1.0	0.38	ug/L		08/25/18 00:02	08/25/18 03:30	1
Beryllium	0.13	U	0.40	0.13	ug/L		08/25/18 00:02	08/25/18 03:30	1
Cadmium	0.31	U	1.0	0.31	ug/L		08/25/18 00:02	08/25/18 03:30	1
Cobalt	0.64	U	2.0	0.64	ug/L		08/25/18 00:02	08/25/18 03:30	1
Chromium	0.66	U	2.0	0.66	ug/L		08/25/18 00:02	08/25/18 03:30	1
Copper	0.95	U	2.0	0.95	ug/L		08/25/18 00:02	08/25/18 03:30	1
Manganese	1.3	U	4.0	1.3	ug/L		08/25/18 00:02	08/25/18 03:30	1
Nickel	0.65	U	2.0	0.65	ug/L		08/25/18 00:02	08/25/18 03:30	1
Lead	0.19	U	0.60	0.19	ug/L		08/25/18 00:02	08/25/18 03:30	1
Antimony	0.31	U	1.0	0.31	ug/L		08/25/18 00:02	08/25/18 03:30	1
Selenium	0.35	U	5.0	0.35	ug/L		08/25/18 00:02	08/25/18 03:30	1
Vanadium	0.59	U	2.0	0.59	ug/L		08/25/18 00:02	08/25/18 03:30	1
Zinc	2.7	U	8.0	2.7	ug/L		08/25/18 00:02	08/25/18 03:30	1
Aluminum	7.5	U	20.0	7.5	ug/L		08/25/18 00:02	08/25/18 03:30	1
Sodium	37.9	U	100	37.9	ug/L		08/25/18 00:02	08/25/18 03:30	1
Magnesium	32.9	U	100	32.9	ug/L		08/25/18 00:02	08/25/18 03:30	1
Potassium	32.5	U	100	32.5	ug/L		08/25/18 00:02	08/25/18 03:30	1
Calcium	33.8	U	100	33.8	ug/L		08/25/18 00:02	08/25/18 03:30	1
Iron	22.9	U	60.0	22.9	ug/L		08/25/18 00:02	08/25/18 03:30	1
Thallium	0.12	U	0.40	0.12	ug/L		08/25/18 00:02	08/25/18 03:30	1

Lab Sample ID: MB 460-547291/1-B
Matrix: Water
Analysis Batch: 547983

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 547300

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.57	U	2.0	0.57	ug/L		08/25/18 00:02	08/27/18 21:15	1

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547435

Client Sample ID: OB-7-082118
Prep Type: Dissolved
Prep Batch: 547300

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	10.0	8.29		ug/L		83	75 - 125
Arsenic	0.77	U	20.0	21.41		ug/L		107	75 - 125
Beryllium	0.26	U	10.0	10.04		ug/L		100	75 - 125
Cadmium	0.61	U	10.0	9.25		ug/L		93	75 - 125
Cobalt	2.1	J	10.0	11.07		ug/L		90	75 - 125
Chromium	1.3	U	20.0	18.05		ug/L		90	75 - 125
Copper	1.9	U	20.0	17.72		ug/L		89	75 - 125
Manganese	2160		100	2433	4	ug/L		268	75 - 125
Nickel	1.5	J	20.0	18.72		ug/L		86	75 - 125
Lead	0.37	U	10.0	9.74		ug/L		97	75 - 125
Antimony	0.62	U	10.0	8.54		ug/L		85	75 - 125
Selenium	0.69	U	20.0	22.72		ug/L		114	75 - 125
Vanadium	1.2	U	20.0	18.63		ug/L		93	75 - 125
Zinc	5.4	U	100	95.55		ug/L		96	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547435

Client Sample ID: OB-7-082118
Prep Type: Dissolved
Prep Batch: 547300

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	15.0	U	1000	930.9		ug/L		93	75 - 125
Sodium	8850		1000	10570	4	ug/L		172	75 - 125
Magnesium	24000		1000	26680	4	ug/L		266	75 - 125
Potassium	2620		1000	3806		ug/L		119	75 - 125
Calcium	64800		1000	71190	4	ug/L		642	75 - 125
Iron	45.7	U	1000	896.8		ug/L		90	75 - 125
Thallium	0.24	U	8.00	7.85		ug/L		98	75 - 125

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547983

Client Sample ID: OB-7-082118
Prep Type: Dissolved
Prep Batch: 547300

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	14.9		20.0	38.42		ug/L		118	75 - 125

Lab Sample ID: 460-163149-2 DU
Matrix: Water
Analysis Batch: 547435

Client Sample ID: OB-7-082118
Prep Type: Dissolved
Prep Batch: 547300

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	0.77	U	0.77	U	ug/L		NC	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	2.1	J	2.05	J	ug/L		3	20
Chromium	1.3	U	1.3	U	ug/L		NC	20
Copper	1.9	U	1.9	U	ug/L		NC	20
Manganese	2160		2163		ug/L		0.07	20
Nickel	1.5	J	1.43	J	ug/L		2	20
Lead	0.37	U	0.37	U	ug/L		NC	20
Antimony	0.62	U	0.62	U	ug/L		NC	20
Selenium	0.69	U	0.69	U	ug/L		NC	20
Vanadium	1.2	U	1.2	U	ug/L		NC	20
Zinc	5.4	U	5.4	U	ug/L		NC	20
Aluminum	15.0	U	15.0	U	ug/L		NC	20
Sodium	8850		8837		ug/L		0.2	20
Magnesium	24000		24150		ug/L		0.5	20
Potassium	2620		2651		ug/L		1	20
Calcium	64800		65240		ug/L		0.7	20
Iron	45.7	U	45.7	U	ug/L		NC	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Lab Sample ID: 460-163149-2 DU
Matrix: Water
Analysis Batch: 547983

Client Sample ID: OB-7-082118
Prep Type: Dissolved
Prep Batch: 547300

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Barium	14.9		16.93		ug/L		13	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-547690/1-C
Matrix: Water
Analysis Batch: 547812

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 547720

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.68	U	1.0	0.68	ug/L		08/27/18 09:32	08/27/18 15:10	1
Arsenic	0.38	U	1.0	0.38	ug/L		08/27/18 09:32	08/27/18 15:10	1
Barium	0.57	U	2.0	0.57	ug/L		08/27/18 09:32	08/27/18 15:10	1
Beryllium	0.13	U	0.40	0.13	ug/L		08/27/18 09:32	08/27/18 15:10	1
Cadmium	0.31	U	1.0	0.31	ug/L		08/27/18 09:32	08/27/18 15:10	1
Cobalt	0.64	U	2.0	0.64	ug/L		08/27/18 09:32	08/27/18 15:10	1
Chromium	0.66	U	2.0	0.66	ug/L		08/27/18 09:32	08/27/18 15:10	1
Copper	0.95	U	2.0	0.95	ug/L		08/27/18 09:32	08/27/18 15:10	1
Manganese	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:10	1
Nickel	0.65	U	2.0	0.65	ug/L		08/27/18 09:32	08/27/18 15:10	1
Lead	0.19	U	0.60	0.19	ug/L		08/27/18 09:32	08/27/18 15:10	1
Antimony	0.31	U	1.0	0.31	ug/L		08/27/18 09:32	08/27/18 15:10	1
Selenium	0.35	U	5.0	0.35	ug/L		08/27/18 09:32	08/27/18 15:10	1
Vanadium	0.59	U	2.0	0.59	ug/L		08/27/18 09:32	08/27/18 15:10	1
Zinc	2.7	U	8.0	2.7	ug/L		08/27/18 09:32	08/27/18 15:10	1
Aluminum	7.5	U	20.0	7.5	ug/L		08/27/18 09:32	08/27/18 15:10	1
Sodium	37.9	U	100	37.9	ug/L		08/27/18 09:32	08/27/18 15:10	1
Magnesium	32.9	U	100	32.9	ug/L		08/27/18 09:32	08/27/18 15:10	1
Potassium	32.5	U	100	32.5	ug/L		08/27/18 09:32	08/27/18 15:10	1
Calcium	33.8	U	100	33.8	ug/L		08/27/18 09:32	08/27/18 15:10	1
Iron	22.9	U	60.0	22.9	ug/L		08/27/18 09:32	08/27/18 15:10	1
Thallium	0.12	U	0.40	0.12	ug/L		08/27/18 09:32	08/27/18 15:10	1

Lab Sample ID: 460-163188-G-2-D MS ^2
Matrix: Water
Analysis Batch: 547812

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 547720

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	10.0	9.76		ug/L		98	75 - 125
Arsenic	0.77	U	20.0	20.31		ug/L		102	75 - 125
Barium	4.2		20.0	24.64		ug/L		102	75 - 125
Beryllium	0.26	U	10.0	10.23		ug/L		102	75 - 125
Cadmium	0.61	U	10.0	9.68		ug/L		97	75 - 125
Cobalt	1.3	U	10.0	9.62		ug/L		96	75 - 125
Chromium	1.3	U	20.0	18.66		ug/L		93	75 - 125
Copper	1.9	U	20.0	18.66		ug/L		93	75 - 125
Manganese	2.7	U	100	100.1		ug/L		100	75 - 125
Nickel	1.3	U	20.0	19.22		ug/L		96	75 - 125
Lead	0.37	U	10.0	9.78		ug/L		98	75 - 125
Antimony	0.62	U	10.0	8.64		ug/L		86	75 - 125
Selenium	0.69	U	20.0	22.75		ug/L		114	75 - 125
Vanadium	1.2	U	20.0	19.16		ug/L		96	75 - 125
Zinc	20.8		100	105.5		ug/L		85	75 - 125
Aluminum	15.0	U	1000	963.4		ug/L		96	75 - 125
Sodium	2950		1000	3814		ug/L		87	75 - 125
Magnesium	2580		1000	3487		ug/L		90	75 - 125
Potassium	1280		1000	2251		ug/L		97	75 - 125
Calcium	7490		1000	8386	4	ug/L		89	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163188-G-2-D MS ^2
Matrix: Water
Analysis Batch: 547812

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 547720

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	45.7	U	1000	969.6		ug/L		97	75 - 125
Thallium	0.24	U	8.00	7.54		ug/L		94	75 - 125

Lab Sample ID: 460-163188-G-2-C DU ^2
Matrix: Water
Analysis Batch: 547812

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 547720

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	0.77	U	0.77	U	ug/L		NC	20
Barium	4.2		4.84		ug/L		14	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	1.3	U	1.3	U	ug/L		NC	20
Chromium	1.3	U	1.3	U	ug/L		NC	20
Copper	1.9	U	1.9	U	ug/L		NC	20
Manganese	2.7	U	2.7	U	ug/L		NC	20
Nickel	1.3	U	1.3	U	ug/L		NC	20
Lead	0.37	U	0.37	U	ug/L		NC	20
Antimony	0.62	U	0.62	U	ug/L		NC	20
Selenium	0.69	U	0.69	U	ug/L		NC	20
Vanadium	1.2	U	1.2	U	ug/L		NC	20
Zinc	20.8		5.4	U	ug/L		NC	20
Aluminum	15.0	U	15.0	U	ug/L		NC	20
Sodium	2950		2940		ug/L		0.2	20
Magnesium	2580		2568		ug/L		0.6	20
Potassium	1280		1265		ug/L		1	20
Calcium	7490		7425		ug/L		0.9	20
Iron	45.7	U	45.7	U	ug/L		NC	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 460-547144/1-A
Matrix: Water
Analysis Batch: 547209

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547144

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:06	08/24/18 13:45	1

Lab Sample ID: LCS 460-547144/2-A
Matrix: Water
Analysis Batch: 547209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547144

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.893		ug/L		89	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 460-163149-11 MS
Matrix: Water
Analysis Batch: 547209

Client Sample ID: RW-16-082118
Prep Type: Total/NA
Prep Batch: 547144

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	0.933		ug/L		93	75 - 125

Lab Sample ID: 460-163149-11 DU
Matrix: Water
Analysis Batch: 547209

Client Sample ID: RW-16-082118
Prep Type: Total/NA
Prep Batch: 547144

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Lab Sample ID: MB 460-547148/1-A
Matrix: Water
Analysis Batch: 547209

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/24/18 12:15	08/24/18 14:34	1

Lab Sample ID: LCS 460-547148/2-A
Matrix: Water
Analysis Batch: 547209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547148

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.902		ug/L		90	80 - 120

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547209

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 547148

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	0.919		ug/L		92	75 - 125

Lab Sample ID: 460-163149-2 DU
Matrix: Water
Analysis Batch: 547209

Client Sample ID: OB-7-082118
Prep Type: Total/NA
Prep Batch: 547148

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Lab Sample ID: LCS 460-547764/2-A
Matrix: Water
Analysis Batch: 547830

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547764

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.976		ug/L		98	80 - 120

Lab Sample ID: MB 460-547750/1-B
Matrix: Water
Analysis Batch: 547830

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 547764

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/27/18 12:59	08/27/18 15:48	1

Lab Sample ID: 460-163149-2 MS
Matrix: Water
Analysis Batch: 547830

Client Sample ID: OB-7-082118
Prep Type: Dissolved
Prep Batch: 547764

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	0.996		ug/L		100	75 - 125

Lab Sample ID: 460-163149-2 DU
Matrix: Water
Analysis Batch: 547830

Client Sample ID: OB-7-082118
Prep Type: Dissolved
Prep Batch: 547764

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 460-548020/1-A
Matrix: Water
Analysis Batch: 548373

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548020

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 12:37	1

Lab Sample ID: LCS 460-548020/2-A
Matrix: Water
Analysis Batch: 548373

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.101		mg/L		101	85 - 115

Lab Sample ID: 460-163168-B-3-B MS
Matrix: Water
Analysis Batch: 548373

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 548020

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0020	J	0.200	0.229		mg/L		115	75 - 125

Lab Sample ID: 460-163168-B-3-C MSD
Matrix: Water
Analysis Batch: 548373

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 548020

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	J	0.200	0.229		mg/L		115	75 - 125	0	20

Lab Sample ID: MB 460-548572/1-A
Matrix: Water
Analysis Batch: 548643

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548572

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:15	1

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LCS 460-548572/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548643 — **Prep Batch: 548572**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0999		mg/L		100	85 - 115

Lab Sample ID: 460-163149-2 MS — **Client Sample ID: OB-7-082118**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548643 — **Prep Batch: 548572**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0020	U	0.200	0.231		mg/L		116	75 - 125

Lab Sample ID: 460-163149-2 MSD — **Client Sample ID: OB-7-082118**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548643 — **Prep Batch: 548572**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U	0.200	0.232		mg/L		116	75 - 125	0	20

Lab Sample ID: 460-163149-11 MS — **Client Sample ID: RW-16-082118**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548643 — **Prep Batch: 548572**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0020	U	0.200	0.247		mg/L		124	75 - 125

Lab Sample ID: 460-163149-11 MSD — **Client Sample ID: RW-16-082118**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548643 — **Prep Batch: 548572**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U	0.200	0.221		mg/L		111	75 - 125	11	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 460-547224/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/24/18 09:30	1
Alkalinity	5.0	U	5.0	5.0	mg/L			08/24/18 09:30	1

Lab Sample ID: MB 460-547224/25 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/24/18 12:22	1
Alkalinity	5.0	U	5.0	5.0	mg/L			08/24/18 12:22	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSSRM 460-547224/26
Matrix: Water
Analysis Batch: 547224

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	384	365.0		mg/L		95.1	84.9 - 114.8

Lab Sample ID: LCSSRM 460-547224/3
Matrix: Water
Analysis Batch: 547224

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	384	361.7		mg/L		94.2	84.9 - 114.8

Lab Sample ID: 460-163149-2 DU
Matrix: Water
Analysis Batch: 547224

Client Sample ID: OB-7-082118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	284		283.4		mg/L		0.2	10
Alkalinity	284		283.4		mg/L		0.2	10

GC/MS VOA

Analysis Batch: 547015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	8260C SIM	
460-163149-2	OB-7-082118	Total/NA	Water	8260C SIM	
460-163149-3	OB-6-082118	Total/NA	Water	8260C SIM	
460-163149-4	OB-4-082118	Total/NA	Water	8260C SIM	
460-163149-5	OB-16-082118	Total/NA	Water	8260C SIM	
460-163149-6	OB-18-082118	Total/NA	Water	8260C SIM	
460-163149-7	OB-17-082118	Total/NA	Water	8260C SIM	
460-163149-8	Dup-01-082118	Total/NA	Water	8260C SIM	
460-163149-9	OB-28-082118	Total/NA	Water	8260C SIM	
460-163149-10	OB-22-082118	Total/NA	Water	8260C SIM	
460-163149-11	RW-16-082118	Total/NA	Water	8260C SIM	
460-163149-12	OB-14A-082118	Total/NA	Water	8260C SIM	
460-163149-13	OB-14B-082118	Total/NA	Water	8260C SIM	
460-163149-14	FB-01-082118	Total/NA	Water	8260C SIM	
460-163149-15	TB-01-082218	Total/NA	Water	8260C SIM	
460-163149-16	OB-23-082118	Total/NA	Water	8260C SIM	
460-163149-17	OB-3-082218	Total/NA	Water	8260C SIM	
460-163149-18	OB-24-082218	Total/NA	Water	8260C SIM	
MB 460-547015/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-547015/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-547015/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Analysis Batch: 547498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	8260C	
460-163149-2	OB-7-082118	Total/NA	Water	8260C	
460-163149-3	OB-6-082118	Total/NA	Water	8260C	
460-163149-4	OB-4-082118	Total/NA	Water	8260C	
460-163149-5	OB-16-082118	Total/NA	Water	8260C	
460-163149-6	OB-18-082118	Total/NA	Water	8260C	
460-163149-7	OB-17-082118	Total/NA	Water	8260C	
460-163149-8	Dup-01-082118	Total/NA	Water	8260C	
460-163149-9	OB-28-082118	Total/NA	Water	8260C	
460-163149-10	OB-22-082118	Total/NA	Water	8260C	
460-163149-17	OB-3-082218	Total/NA	Water	8260C	
460-163149-18	OB-24-082218	Total/NA	Water	8260C	
MB 460-547498/10	Method Blank	Total/NA	Water	8260C	
LCS 460-547498/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-547498/5	Lab Control Sample Dup	Total/NA	Water	8260C	
460-163149-2 MS	OB-7-082118	Total/NA	Water	8260C	
460-163149-2 MSD	OB-7-082118	Total/NA	Water	8260C	

Analysis Batch: 547593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-11	RW-16-082118	Total/NA	Water	8260C	
460-163149-12	OB-14A-082118	Total/NA	Water	8260C	
460-163149-13	OB-14B-082118	Total/NA	Water	8260C	
460-163149-14	FB-01-082118	Total/NA	Water	8260C	
460-163149-15	TB-01-082218	Total/NA	Water	8260C	
460-163149-16	OB-23-082118	Total/NA	Water	8260C	
MB 460-547593/9	Method Blank	Total/NA	Water	8260C	

GC/MS VOA (Continued)

Analysis Batch: 547593 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-547593/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-547593/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 547967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-547967/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-547967/4	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-547967/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
460-163149-2 MS	OB-7-082118	Total/NA	Water	8260C SIM	
460-163149-2 MSD	OB-7-082118	Total/NA	Water	8260C SIM	

GC/MS Semi VOA

Prep Batch: 547073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	3510C	
460-163149-2	OB-7-082118	Total/NA	Water	3510C	
460-163149-3	OB-6-082118	Total/NA	Water	3510C	
460-163149-4	OB-4-082118	Total/NA	Water	3510C	
460-163149-5	OB-16-082118	Total/NA	Water	3510C	
460-163149-6	OB-18-082118	Total/NA	Water	3510C	
460-163149-7	OB-17-082118	Total/NA	Water	3510C	
460-163149-8	Dup-01-082118	Total/NA	Water	3510C	
460-163149-9	OB-28-082118	Total/NA	Water	3510C	
460-163149-10	OB-22-082118	Total/NA	Water	3510C	
460-163149-11	RW-16-082118	Total/NA	Water	3510C	
460-163149-12	OB-14A-082118	Total/NA	Water	3510C	
460-163149-13	OB-14B-082118	Total/NA	Water	3510C	
460-163149-14	FB-01-082118	Total/NA	Water	3510C	
460-163149-16	OB-23-082118	Total/NA	Water	3510C	
460-163149-17	OB-3-082218	Total/NA	Water	3510C	
460-163149-18	OB-24-082218	Total/NA	Water	3510C	
MB 460-547073/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-547073/2-A	Lab Control Sample	Total/NA	Water	3510C	
460-163149-2 MS	OB-7-082118	Total/NA	Water	3510C	
460-163149-2 MSD	OB-7-082118	Total/NA	Water	3510C	

Analysis Batch: 547155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-2	OB-7-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-3	OB-6-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-4	OB-4-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-5	OB-16-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-6	OB-18-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-7	OB-17-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-8	Dup-01-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-9	OB-28-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-10	OB-22-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-11	RW-16-082118	Total/NA	Water	8270D SIM ID	547073

GC/MS Semi VOA (Continued)

Analysis Batch: 547155 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-12	OB-14A-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-13	OB-14B-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-14	FB-01-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-16	OB-23-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-17	OB-3-082218	Total/NA	Water	8270D SIM ID	547073
460-163149-18	OB-24-082218	Total/NA	Water	8270D SIM ID	547073
MB 460-547073/1-A	Method Blank	Total/NA	Water	8270D SIM ID	547073
LCS 460-547073/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	547073
460-163149-2 MS	OB-7-082118	Total/NA	Water	8270D SIM ID	547073
460-163149-2 MSD	OB-7-082118	Total/NA	Water	8270D SIM ID	547073

Prep Batch: 547339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	3510C	
460-163149-2	OB-7-082118	Total/NA	Water	3510C	
460-163149-3	OB-6-082118	Total/NA	Water	3510C	
460-163149-4	OB-4-082118	Total/NA	Water	3510C	
460-163149-5	OB-16-082118	Total/NA	Water	3510C	
460-163149-6	OB-18-082118	Total/NA	Water	3510C	
460-163149-7	OB-17-082118	Total/NA	Water	3510C	
460-163149-8	Dup-01-082118	Total/NA	Water	3510C	
460-163149-9	OB-28-082118	Total/NA	Water	3510C	
460-163149-10	OB-22-082118	Total/NA	Water	3510C	
460-163149-11	RW-16-082118	Total/NA	Water	3510C	
460-163149-12	OB-14A-082118	Total/NA	Water	3510C	
MB 460-547339/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-547339/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-547339/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-547339/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-547339/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-163149-2 MS	OB-7-082118	Total/NA	Water	3510C	
460-163149-2 MSD	OB-7-082118	Total/NA	Water	3510C	

Prep Batch: 547376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-13	OB-14B-082118	Total/NA	Water	3510C	
460-163149-14	FB-01-082118	Total/NA	Water	3510C	
460-163149-16	OB-23-082118	Total/NA	Water	3510C	
460-163149-17	OB-3-082218	Total/NA	Water	3510C	
460-163149-18	OB-24-082218	Total/NA	Water	3510C	
MB 460-547376/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-547376/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-547376/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-547376/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-547376/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-163182-E-2-A MS	Matrix Spike	Total/NA	Water	3510C	
460-163182-E-2-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 547427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	8270D	547339

GC/MS Semi VOA (Continued)

Analysis Batch: 547427 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-2	OB-7-082118	Total/NA	Water	8270D	547339
460-163149-3	OB-6-082118	Total/NA	Water	8270D	547339
460-163149-4	OB-4-082118	Total/NA	Water	8270D	547339
460-163149-5	OB-16-082118	Total/NA	Water	8270D	547339
460-163149-6	OB-18-082118	Total/NA	Water	8270D	547339
460-163149-7	OB-17-082118	Total/NA	Water	8270D	547339
460-163149-8	Dup-01-082118	Total/NA	Water	8270D	547339
460-163149-9	OB-28-082118	Total/NA	Water	8270D	547339
460-163149-10	OB-22-082118	Total/NA	Water	8270D	547339
460-163149-11	RW-16-082118	Total/NA	Water	8270D	547339
460-163149-12	OB-14A-082118	Total/NA	Water	8270D	547339
MB 460-547339/1-A	Method Blank	Total/NA	Water	8270D	547339
LCS 460-547339/2-A	Lab Control Sample	Total/NA	Water	8270D	547339
LCS 460-547339/3-A	Lab Control Sample	Total/NA	Water	8270D	547339
460-163149-2 MS	OB-7-082118	Total/NA	Water	8270D	547339
460-163149-2 MSD	OB-7-082118	Total/NA	Water	8270D	547339

Analysis Batch: 547472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-13	OB-14B-082118	Total/NA	Water	8270D	547376
460-163149-14	FB-01-082118	Total/NA	Water	8270D	547376
460-163149-16	OB-23-082118	Total/NA	Water	8270D	547376
460-163149-17	OB-3-082218	Total/NA	Water	8270D	547376
460-163149-18	OB-24-082218	Total/NA	Water	8270D	547376
MB 460-547376/1-A	Method Blank	Total/NA	Water	8270D	547376
LCS 460-547376/2-A	Lab Control Sample	Total/NA	Water	8270D	547376
LCS 460-547376/3-A	Lab Control Sample	Total/NA	Water	8270D	547376
460-163182-E-2-A MS	Matrix Spike	Total/NA	Water	8270D	547376
460-163182-E-2-B MSD	Matrix Spike Duplicate	Total/NA	Water	8270D	547376

Analysis Batch: 547488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-13	OB-14B-082118	Total/NA	Water	8270D SIM	547376
460-163149-14	FB-01-082118	Total/NA	Water	8270D SIM	547376
460-163149-16	OB-23-082118	Total/NA	Water	8270D SIM	547376
460-163149-17	OB-3-082218	Total/NA	Water	8270D SIM	547376
460-163149-18	OB-24-082218	Total/NA	Water	8270D SIM	547376
MB 460-547376/1-A	Method Blank	Total/NA	Water	8270D SIM	547376
LCS 460-547376/4-A	Lab Control Sample	Total/NA	Water	8270D SIM	547376
LCSD 460-547376/5-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	547376

Analysis Batch: 547560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	8270D SIM	547339
460-163149-4	OB-4-082118	Total/NA	Water	8270D SIM	547339
460-163149-5	OB-16-082118	Total/NA	Water	8270D SIM	547339
460-163149-7	OB-17-082118	Total/NA	Water	8270D SIM	547339
460-163149-8	Dup-01-082118	Total/NA	Water	8270D SIM	547339
460-163149-9	OB-28-082118	Total/NA	Water	8270D SIM	547339
460-163149-10	OB-22-082118	Total/NA	Water	8270D SIM	547339
460-163149-11	RW-16-082118	Total/NA	Water	8270D SIM	547339

GC/MS Semi VOA (Continued)

Analysis Batch: 547560 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-12	OB-14A-082118	Total/NA	Water	8270D SIM	547339
LCS 460-547339/4-A	Lab Control Sample	Total/NA	Water	8270D SIM	547339
LCSD 460-547339/5-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	547339

Analysis Batch: 547693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-2	OB-7-082118	Total/NA	Water	8270D SIM	547339
460-163149-3	OB-6-082118	Total/NA	Water	8270D SIM	547339
460-163149-6	OB-18-082118	Total/NA	Water	8270D SIM	547339
MB 460-547339/1-A	Method Blank	Total/NA	Water	8270D SIM	547339

GC Semi VOA

Prep Batch: 547236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	3510C	
460-163149-2	OB-7-082118	Total/NA	Water	3510C	
460-163149-3	OB-6-082118	Total/NA	Water	3510C	
460-163149-4	OB-4-082118	Total/NA	Water	3510C	
460-163149-5	OB-16-082118	Total/NA	Water	3510C	
460-163149-6	OB-18-082118	Total/NA	Water	3510C	
460-163149-7	OB-17-082118	Total/NA	Water	3510C	
460-163149-8	Dup-01-082118	Total/NA	Water	3510C	
460-163149-9	OB-28-082118	Total/NA	Water	3510C	
460-163149-10	OB-22-082118	Total/NA	Water	3510C	
460-163149-11	RW-16-082118	Total/NA	Water	3510C	
460-163149-12	OB-14A-082118	Total/NA	Water	3510C	
460-163149-13	OB-14B-082118	Total/NA	Water	3510C	
460-163149-14	FB-01-082118	Total/NA	Water	3510C	
460-163149-16	OB-23-082118	Total/NA	Water	3510C	
460-163149-17	OB-3-082218	Total/NA	Water	3510C	
460-163149-18	OB-24-082218	Total/NA	Water	3510C	
MB 460-547236/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-547236/2-A	Lab Control Sample	Total/NA	Water	3510C	
460-163149-2 MS	OB-7-082118	Total/NA	Water	3510C	
460-163149-2 MSD	OB-7-082118	Total/NA	Water	3510C	

Analysis Batch: 547439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	8082A	547236
460-163149-2	OB-7-082118	Total/NA	Water	8082A	547236
460-163149-3	OB-6-082118	Total/NA	Water	8082A	547236
460-163149-4	OB-4-082118	Total/NA	Water	8082A	547236
460-163149-5	OB-16-082118	Total/NA	Water	8082A	547236
460-163149-6	OB-18-082118	Total/NA	Water	8082A	547236
460-163149-7	OB-17-082118	Total/NA	Water	8082A	547236
460-163149-8	Dup-01-082118	Total/NA	Water	8082A	547236
460-163149-9	OB-28-082118	Total/NA	Water	8082A	547236
460-163149-10	OB-22-082118	Total/NA	Water	8082A	547236
460-163149-11	RW-16-082118	Total/NA	Water	8082A	547236

GC Semi VOA (Continued)

Analysis Batch: 547439 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-12	OB-14A-082118	Total/NA	Water	8082A	547236
460-163149-13	OB-14B-082118	Total/NA	Water	8082A	547236
460-163149-14	FB-01-082118	Total/NA	Water	8082A	547236
460-163149-16	OB-23-082118	Total/NA	Water	8082A	547236
460-163149-17	OB-3-082218	Total/NA	Water	8082A	547236
460-163149-18	OB-24-082218	Total/NA	Water	8082A	547236
MB 460-547236/1-A	Method Blank	Total/NA	Water	8082A	547236
LCS 460-547236/2-A	Lab Control Sample	Total/NA	Water	8082A	547236
460-163149-2 MS	OB-7-082118	Total/NA	Water	8082A	547236
460-163149-2 MSD	OB-7-082118	Total/NA	Water	8082A	547236

HPLC/IC

Analysis Batch: 547536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	9056A	
460-163149-2	OB-7-082118	Total/NA	Water	9056A	
460-163149-3	OB-6-082118	Total/NA	Water	9056A	
460-163149-4	OB-4-082118	Total/NA	Water	9056A	
460-163149-5	OB-16-082118	Total/NA	Water	9056A	
460-163149-6	OB-18-082118	Total/NA	Water	9056A	
460-163149-8	Dup-01-082118	Total/NA	Water	9056A	
460-163149-10	OB-22-082118	Total/NA	Water	9056A	
460-163149-11	RW-16-082118	Total/NA	Water	9056A	
460-163149-12	OB-14A-082118	Total/NA	Water	9056A	
460-163149-13	OB-14B-082118	Total/NA	Water	9056A	
460-163149-14	FB-01-082118	Total/NA	Water	9056A	
460-163149-16	OB-23-082118	Total/NA	Water	9056A	
460-163149-17	OB-3-082218	Total/NA	Water	9056A	
460-163149-18	OB-24-082218	Total/NA	Water	9056A	
MB 460-547536/3	Method Blank	Total/NA	Water	9056A	
LCS 460-547536/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-547536/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163149-2 MS	OB-7-082118	Total/NA	Water	9056A	
460-163149-2 MSD	OB-7-082118	Total/NA	Water	9056A	
460-163149-6 MS	OB-18-082118	Total/NA	Water	9056A	
460-163149-6 MSD	OB-18-082118	Total/NA	Water	9056A	
460-163149-2 DU	OB-7-082118	Total/NA	Water	9056A	
460-163149-6 DU	OB-18-082118	Total/NA	Water	9056A	

Analysis Batch: 547688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1 - DL	OB-25-082118	Total/NA	Water	9056A	
460-163149-2 - DL	OB-7-082118	Total/NA	Water	9056A	
460-163149-3 - DL	OB-6-082118	Total/NA	Water	9056A	
460-163149-4 - DL	OB-4-082118	Total/NA	Water	9056A	
460-163149-5 - DL	OB-16-082118	Total/NA	Water	9056A	
460-163149-7 - DL	OB-17-082118	Total/NA	Water	9056A	
460-163149-9 - DL2	OB-28-082118	Total/NA	Water	9056A	
460-163149-9 - DL	OB-28-082118	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 547688 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-10 - DL	OB-22-082118	Total/NA	Water	9056A	
460-163149-11 - DL	RW-16-082118	Total/NA	Water	9056A	
460-163149-12 - DL	OB-14A-082118	Total/NA	Water	9056A	
460-163149-13 - DL	OB-14B-082118	Total/NA	Water	9056A	
460-163149-16 - DL	OB-23-082118	Total/NA	Water	9056A	
460-163149-18 - DL	OB-24-082218	Total/NA	Water	9056A	
MB 460-547688/3	Method Blank	Total/NA	Water	9056A	
LCS 460-547688/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-547688/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163149-2 MS - DL	OB-7-082118	Total/NA	Water	9056A	
460-163149-2 MSD - DL	OB-7-082118	Total/NA	Water	9056A	
460-163149-2 DU - DL	OB-7-082118	Total/NA	Water	9056A	

Metals

Prep Batch: 547144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-9	OB-28-082118	Total/NA	Water	7470A	
460-163149-10	OB-22-082118	Total/NA	Water	7470A	
460-163149-11	RW-16-082118	Total/NA	Water	7470A	
460-163149-12	OB-14A-082118	Total/NA	Water	7470A	
460-163149-13	OB-14B-082118	Total/NA	Water	7470A	
460-163149-14	FB-01-082118	Total/NA	Water	7470A	
460-163149-16	OB-23-082118	Total/NA	Water	7470A	
460-163149-17	OB-3-082218	Total/NA	Water	7470A	
MB 460-547144/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-547144/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163149-11 MS	RW-16-082118	Total/NA	Water	7470A	
460-163149-11 DU	RW-16-082118	Total/NA	Water	7470A	

Prep Batch: 547148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	7470A	
460-163149-2	OB-7-082118	Total/NA	Water	7470A	
460-163149-3	OB-6-082118	Total/NA	Water	7470A	
460-163149-4	OB-4-082118	Total/NA	Water	7470A	
460-163149-5	OB-16-082118	Total/NA	Water	7470A	
460-163149-6	OB-18-082118	Total/NA	Water	7470A	
460-163149-7	OB-17-082118	Total/NA	Water	7470A	
460-163149-8	Dup-01-082118	Total/NA	Water	7470A	
460-163149-18	OB-24-082218	Total/NA	Water	7470A	
MB 460-547148/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-547148/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163149-2 MS	OB-7-082118	Total/NA	Water	7470A	
460-163149-2 DU	OB-7-082118	Total/NA	Water	7470A	

Analysis Batch: 547209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	7470A	547148
460-163149-2	OB-7-082118	Total/NA	Water	7470A	547148

Metals (Continued)

Analysis Batch: 547209 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-3	OB-6-082118	Total/NA	Water	7470A	547148
460-163149-4	OB-4-082118	Total/NA	Water	7470A	547148
460-163149-5	OB-16-082118	Total/NA	Water	7470A	547148
460-163149-6	OB-18-082118	Total/NA	Water	7470A	547148
460-163149-7	OB-17-082118	Total/NA	Water	7470A	547148
460-163149-8	Dup-01-082118	Total/NA	Water	7470A	547148
460-163149-9	OB-28-082118	Total/NA	Water	7470A	547144
460-163149-10	OB-22-082118	Total/NA	Water	7470A	547144
460-163149-11	RW-16-082118	Total/NA	Water	7470A	547144
460-163149-12	OB-14A-082118	Total/NA	Water	7470A	547144
460-163149-13	OB-14B-082118	Total/NA	Water	7470A	547144
460-163149-14	FB-01-082118	Total/NA	Water	7470A	547144
460-163149-16	OB-23-082118	Total/NA	Water	7470A	547144
460-163149-17	OB-3-082218	Total/NA	Water	7470A	547144
460-163149-18	OB-24-082218	Total/NA	Water	7470A	547148
MB 460-547144/1-A	Method Blank	Total/NA	Water	7470A	547144
MB 460-547148/1-A	Method Blank	Total/NA	Water	7470A	547148
LCS 460-547144/2-A	Lab Control Sample	Total/NA	Water	7470A	547144
LCS 460-547148/2-A	Lab Control Sample	Total/NA	Water	7470A	547148
460-163149-2 MS	OB-7-082118	Total/NA	Water	7470A	547148
460-163149-11 MS	RW-16-082118	Total/NA	Water	7470A	547144
460-163149-2 DU	OB-7-082118	Total/NA	Water	7470A	547148
460-163149-11 DU	RW-16-082118	Total/NA	Water	7470A	547144

Filtration Batch: 547291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Dissolved	Water	FILTRATION	
460-163149-2	OB-7-082118	Dissolved	Water	FILTRATION	
460-163149-4	OB-4-082118	Dissolved	Water	FILTRATION	
460-163149-5	OB-16-082118	Dissolved	Water	FILTRATION	
460-163149-6	OB-18-082118	Dissolved	Water	FILTRATION	
460-163149-7	OB-17-082118	Dissolved	Water	FILTRATION	
460-163149-8	Dup-01-082118	Dissolved	Water	FILTRATION	
460-163149-9	OB-28-082118	Dissolved	Water	FILTRATION	
460-163149-10	OB-22-082118	Dissolved	Water	FILTRATION	
460-163149-11	RW-16-082118	Dissolved	Water	FILTRATION	
460-163149-12	OB-14A-082118	Dissolved	Water	FILTRATION	
460-163149-13	OB-14B-082118	Dissolved	Water	FILTRATION	
460-163149-14	FB-01-082118	Dissolved	Water	FILTRATION	
460-163149-16	OB-23-082118	Dissolved	Water	FILTRATION	
460-163149-17	OB-3-082218	Dissolved	Water	FILTRATION	
460-163149-18	OB-24-082218	Dissolved	Water	FILTRATION	
MB 460-547291/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163149-2 MS	OB-7-082118	Dissolved	Water	FILTRATION	
460-163149-2 DU	OB-7-082118	Dissolved	Water	FILTRATION	

Prep Batch: 547300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Dissolved	Water	3010A	547291
460-163149-2	OB-7-082118	Dissolved	Water	3010A	547291
460-163149-4	OB-4-082118	Dissolved	Water	3010A	547291

Metals (Continued)

Prep Batch: 547300 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-5	OB-16-082118	Dissolved	Water	3010A	547291
460-163149-6	OB-18-082118	Dissolved	Water	3010A	547291
460-163149-7	OB-17-082118	Dissolved	Water	3010A	547291
460-163149-8	Dup-01-082118	Dissolved	Water	3010A	547291
460-163149-9	OB-28-082118	Dissolved	Water	3010A	547291
460-163149-10	OB-22-082118	Dissolved	Water	3010A	547291
460-163149-11	RW-16-082118	Dissolved	Water	3010A	547291
460-163149-12	OB-14A-082118	Dissolved	Water	3010A	547291
460-163149-13	OB-14B-082118	Dissolved	Water	3010A	547291
460-163149-14	FB-01-082118	Dissolved	Water	3010A	547291
460-163149-16	OB-23-082118	Dissolved	Water	3010A	547291
460-163149-17	OB-3-082218	Dissolved	Water	3010A	547291
460-163149-18	OB-24-082218	Dissolved	Water	3010A	547291
MB 460-547291/1-B	Method Blank	Dissolved	Water	3010A	547291
LCS 460-547300/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-163149-2 MS	OB-7-082118	Dissolved	Water	3010A	547291
460-163149-2 DU	OB-7-082118	Dissolved	Water	3010A	547291

Analysis Batch: 547435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-2	OB-7-082118	Dissolved	Water	6020B	547300
460-163149-4	OB-4-082118	Dissolved	Water	6020B	547300
460-163149-5	OB-16-082118	Dissolved	Water	6020B	547300
460-163149-7	OB-17-082118	Dissolved	Water	6020B	547300
460-163149-9	OB-28-082118	Dissolved	Water	6020B	547300
460-163149-12	OB-14A-082118	Dissolved	Water	6020B	547300
460-163149-14	FB-01-082118	Dissolved	Water	6020B	547300
460-163149-16	OB-23-082118	Dissolved	Water	6020B	547300
MB 460-547291/1-B	Method Blank	Dissolved	Water	6020B	547300
LCS 460-547300/2-A	Lab Control Sample	Total/NA	Water	6020B	547300
460-163149-2 MS	OB-7-082118	Dissolved	Water	6020B	547300
460-163149-2 DU	OB-7-082118	Dissolved	Water	6020B	547300

Filtration Batch: 547690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-3	OB-6-082118	Dissolved	Water	FILTRATION	
MB 460-547690/1-C	Method Blank	Dissolved	Water	FILTRATION	
460-163188-G-2-D MS ^2	Matrix Spike	Dissolved	Water	FILTRATION	
460-163188-G-2-C DU ^2	Duplicate	Dissolved	Water	FILTRATION	

Prep Batch: 547720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-3	OB-6-082118	Dissolved	Water	3010A	547690
MB 460-547690/1-C	Method Blank	Dissolved	Water	3010A	547690
LCS 460-547720/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-163188-G-2-D MS ^2	Matrix Spike	Dissolved	Water	3010A	547690
460-163188-G-2-C DU ^2	Duplicate	Dissolved	Water	3010A	547690

Filtration Batch: 547750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Dissolved	Water	FILTRATION	

Metals (Continued)

Filtration Batch: 547750 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-2	OB-7-082118	Dissolved	Water	FILTRATION	
460-163149-3	OB-6-082118	Dissolved	Water	FILTRATION	
460-163149-4	OB-4-082118	Dissolved	Water	FILTRATION	
460-163149-5	OB-16-082118	Dissolved	Water	FILTRATION	
460-163149-6	OB-18-082118	Dissolved	Water	FILTRATION	
460-163149-7	OB-17-082118	Dissolved	Water	FILTRATION	
460-163149-8	Dup-01-082118	Dissolved	Water	FILTRATION	
460-163149-9	OB-28-082118	Dissolved	Water	FILTRATION	
460-163149-10	OB-22-082118	Dissolved	Water	FILTRATION	
460-163149-11	RW-16-082118	Dissolved	Water	FILTRATION	
460-163149-12	OB-14A-082118	Dissolved	Water	FILTRATION	
460-163149-13	OB-14B-082118	Dissolved	Water	FILTRATION	
460-163149-14	FB-01-082118	Dissolved	Water	FILTRATION	
460-163149-16	OB-23-082118	Dissolved	Water	FILTRATION	
460-163149-17	OB-3-082218	Dissolved	Water	FILTRATION	
460-163149-18	OB-24-082218	Dissolved	Water	FILTRATION	
MB 460-547750/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163149-2 MS	OB-7-082118	Dissolved	Water	FILTRATION	
460-163149-2 DU	OB-7-082118	Dissolved	Water	FILTRATION	

Prep Batch: 547764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Dissolved	Water	7470A	547750
460-163149-2	OB-7-082118	Dissolved	Water	7470A	547750
460-163149-3	OB-6-082118	Dissolved	Water	7470A	547750
460-163149-4	OB-4-082118	Dissolved	Water	7470A	547750
460-163149-5	OB-16-082118	Dissolved	Water	7470A	547750
460-163149-6	OB-18-082118	Dissolved	Water	7470A	547750
460-163149-7	OB-17-082118	Dissolved	Water	7470A	547750
460-163149-8	Dup-01-082118	Dissolved	Water	7470A	547750
460-163149-9	OB-28-082118	Dissolved	Water	7470A	547750
460-163149-10	OB-22-082118	Dissolved	Water	7470A	547750
460-163149-11	RW-16-082118	Dissolved	Water	7470A	547750
460-163149-12	OB-14A-082118	Dissolved	Water	7470A	547750
460-163149-13	OB-14B-082118	Dissolved	Water	7470A	547750
460-163149-14	FB-01-082118	Dissolved	Water	7470A	547750
460-163149-16	OB-23-082118	Dissolved	Water	7470A	547750
460-163149-17	OB-3-082218	Dissolved	Water	7470A	547750
460-163149-18	OB-24-082218	Dissolved	Water	7470A	547750
MB 460-547750/1-B	Method Blank	Dissolved	Water	7470A	547750
LCS 460-547764/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163149-2 MS	OB-7-082118	Dissolved	Water	7470A	547750
460-163149-2 DU	OB-7-082118	Dissolved	Water	7470A	547750

Analysis Batch: 547812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-3	OB-6-082118	Dissolved	Water	6020B	547720
MB 460-547690/1-C	Method Blank	Dissolved	Water	6020B	547720
LCS 460-547720/2-A	Lab Control Sample	Total/NA	Water	6020B	547720
460-163188-G-2-D MS ^2	Matrix Spike	Dissolved	Water	6020B	547720
460-163188-G-2-C DU ^2	Duplicate	Dissolved	Water	6020B	547720

Analysis Batch: 547830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Dissolved	Water	7470A	547764
460-163149-2	OB-7-082118	Dissolved	Water	7470A	547764
460-163149-3	OB-6-082118	Dissolved	Water	7470A	547764
460-163149-4	OB-4-082118	Dissolved	Water	7470A	547764
460-163149-5	OB-16-082118	Dissolved	Water	7470A	547764
460-163149-6	OB-18-082118	Dissolved	Water	7470A	547764
460-163149-7	OB-17-082118	Dissolved	Water	7470A	547764
460-163149-8	Dup-01-082118	Dissolved	Water	7470A	547764
460-163149-9	OB-28-082118	Dissolved	Water	7470A	547764
460-163149-10	OB-22-082118	Dissolved	Water	7470A	547764
460-163149-11	RW-16-082118	Dissolved	Water	7470A	547764
460-163149-12	OB-14A-082118	Dissolved	Water	7470A	547764
460-163149-13	OB-14B-082118	Dissolved	Water	7470A	547764
460-163149-14	FB-01-082118	Dissolved	Water	7470A	547764
460-163149-16	OB-23-082118	Dissolved	Water	7470A	547764
460-163149-17	OB-3-082218	Dissolved	Water	7470A	547764
460-163149-18	OB-24-082218	Dissolved	Water	7470A	547764
MB 460-547750/1-B	Method Blank	Dissolved	Water	7470A	547764
LCS 460-547764/2-A	Lab Control Sample	Total/NA	Water	7470A	547764
460-163149-2 MS	OB-7-082118	Dissolved	Water	7470A	547764
460-163149-2 DU	OB-7-082118	Dissolved	Water	7470A	547764

Analysis Batch: 547983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-2	OB-7-082118	Dissolved	Water	6020B	547300
460-163149-12	OB-14A-082118	Dissolved	Water	6020B	547300
460-163149-14	FB-01-082118	Dissolved	Water	6020B	547300
460-163149-16	OB-23-082118	Dissolved	Water	6020B	547300
MB 460-547291/1-B	Method Blank	Dissolved	Water	6020B	547300
LCS 460-547300/2-A	Lab Control Sample	Total/NA	Water	6020B	547300
460-163149-2 MS	OB-7-082118	Dissolved	Water	6020B	547300
460-163149-2 DU	OB-7-082118	Dissolved	Water	6020B	547300

Prep Batch: 548003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	3010A	
460-163149-2	OB-7-082118	Total/NA	Water	3010A	
460-163149-3	OB-6-082118	Total/NA	Water	3010A	
460-163149-4	OB-4-082118	Total/NA	Water	3010A	
460-163149-5	OB-16-082118	Total/NA	Water	3010A	
460-163149-6	OB-18-082118	Total/NA	Water	3010A	
460-163149-7	OB-17-082118	Total/NA	Water	3010A	
460-163149-8	Dup-01-082118	Total/NA	Water	3010A	
460-163149-9	OB-28-082118	Total/NA	Water	3010A	
460-163149-10	OB-22-082118	Total/NA	Water	3010A	
460-163149-11	RW-16-082118	Total/NA	Water	3010A	
460-163149-12	OB-14A-082118	Total/NA	Water	3010A	
460-163149-13	OB-14B-082118	Total/NA	Water	3010A	
460-163149-14	FB-01-082118	Total/NA	Water	3010A	
460-163149-16	OB-23-082118	Total/NA	Water	3010A	
460-163149-17	OB-3-082218	Total/NA	Water	3010A	
460-163149-18	OB-24-082218	Total/NA	Water	3010A	
MB 460-548003/1-A ^2	Method Blank	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 548003 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-548003/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-163149-2 MS	OB-7-082118	Total/NA	Water	3010A	
460-163149-2 DU	OB-7-082118	Total/NA	Water	3010A	

Analysis Batch: 548089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	6020B	548003
460-163149-2	OB-7-082118	Total/NA	Water	6020B	548003
460-163149-3	OB-6-082118	Total/NA	Water	6020B	548003
460-163149-4	OB-4-082118	Total/NA	Water	6020B	548003
460-163149-5	OB-16-082118	Total/NA	Water	6020B	548003
460-163149-6	OB-18-082118	Total/NA	Water	6020B	548003
460-163149-7	OB-17-082118	Total/NA	Water	6020B	548003
460-163149-8	Dup-01-082118	Total/NA	Water	6020B	548003
460-163149-9	OB-28-082118	Total/NA	Water	6020B	548003
460-163149-10	OB-22-082118	Total/NA	Water	6020B	548003
460-163149-11	RW-16-082118	Total/NA	Water	6020B	548003
460-163149-12	OB-14A-082118	Total/NA	Water	6020B	548003
460-163149-13	OB-14B-082118	Total/NA	Water	6020B	548003
460-163149-14	FB-01-082118	Total/NA	Water	6020B	548003
460-163149-16	OB-23-082118	Total/NA	Water	6020B	548003
460-163149-17	OB-3-082218	Total/NA	Water	6020B	548003
460-163149-18	OB-24-082218	Total/NA	Water	6020B	548003
MB 460-548003/1-A ^2	Method Blank	Total/NA	Water	6020B	548003
LCS 460-548003/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	548003
460-163149-2 MS	OB-7-082118	Total/NA	Water	6020B	548003
460-163149-2 DU	OB-7-082118	Total/NA	Water	6020B	548003

Analysis Batch: 548548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Dissolved	Water	6020B	547300
460-163149-6	OB-18-082118	Dissolved	Water	6020B	547300
460-163149-8	Dup-01-082118	Dissolved	Water	6020B	547300
460-163149-10	OB-22-082118	Dissolved	Water	6020B	547300
460-163149-11	RW-16-082118	Dissolved	Water	6020B	547300
460-163149-13	OB-14B-082118	Dissolved	Water	6020B	547300
460-163149-17	OB-3-082218	Dissolved	Water	6020B	547300
460-163149-18	OB-24-082218	Dissolved	Water	6020B	547300

General Chemistry

Analysis Batch: 547224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	SM 2320B	
460-163149-2	OB-7-082118	Total/NA	Water	SM 2320B	
460-163149-3	OB-6-082118	Total/NA	Water	SM 2320B	
460-163149-4	OB-4-082118	Total/NA	Water	SM 2320B	
460-163149-5	OB-16-082118	Total/NA	Water	SM 2320B	
460-163149-6	OB-18-082118	Total/NA	Water	SM 2320B	
460-163149-7	OB-17-082118	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 547224 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-8	Dup-01-082118	Total/NA	Water	SM 2320B	
460-163149-9	OB-28-082118	Total/NA	Water	SM 2320B	
460-163149-10	OB-22-082118	Total/NA	Water	SM 2320B	
460-163149-11	RW-16-082118	Total/NA	Water	SM 2320B	
460-163149-12	OB-14A-082118	Total/NA	Water	SM 2320B	
460-163149-13	OB-14B-082118	Total/NA	Water	SM 2320B	
460-163149-14	FB-01-082118	Total/NA	Water	SM 2320B	
460-163149-16	OB-23-082118	Total/NA	Water	SM 2320B	
460-163149-17	OB-3-082218	Total/NA	Water	SM 2320B	
460-163149-18	OB-24-082218	Total/NA	Water	SM 2320B	
MB 460-547224/2	Method Blank	Total/NA	Water	SM 2320B	
MB 460-547224/25	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-547224/26	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSSRM 460-547224/3	Lab Control Sample	Total/NA	Water	SM 2320B	
460-163149-2 DU	OB-7-082118	Total/NA	Water	SM 2320B	

Prep Batch: 548020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	9012B	
MB 460-548020/1-A	Method Blank	Total/NA	Water	9012B	
LCS 460-548020/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163168-B-3-B MS	Matrix Spike	Total/NA	Water	9012B	
460-163168-B-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	

Analysis Batch: 548373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-1	OB-25-082118	Total/NA	Water	9012B	548020
MB 460-548020/1-A	Method Blank	Total/NA	Water	9012B	548020
LCS 460-548020/2-A	Lab Control Sample	Total/NA	Water	9012B	548020
460-163168-B-3-B MS	Matrix Spike	Total/NA	Water	9012B	548020
460-163168-B-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	548020

Prep Batch: 548572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-2	OB-7-082118	Total/NA	Water	9012B	
460-163149-3	OB-6-082118	Total/NA	Water	9012B	
460-163149-4	OB-4-082118	Total/NA	Water	9012B	
460-163149-5	OB-16-082118	Total/NA	Water	9012B	
460-163149-6	OB-18-082118	Total/NA	Water	9012B	
460-163149-7	OB-17-082118	Total/NA	Water	9012B	
460-163149-8	Dup-01-082118	Total/NA	Water	9012B	
460-163149-9	OB-28-082118	Total/NA	Water	9012B	
460-163149-10	OB-22-082118	Total/NA	Water	9012B	
460-163149-11	RW-16-082118	Total/NA	Water	9012B	
460-163149-12	OB-14A-082118	Total/NA	Water	9012B	
460-163149-13	OB-14B-082118	Total/NA	Water	9012B	
460-163149-14	FB-01-082118	Total/NA	Water	9012B	
460-163149-16	OB-23-082118	Total/NA	Water	9012B	
460-163149-17	OB-3-082218	Total/NA	Water	9012B	
460-163149-18	OB-24-082218	Total/NA	Water	9012B	
MB 460-548572/1-A	Method Blank	Total/NA	Water	9012B	

General Chemistry (Continued)

Prep Batch: 548572 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-548572/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163149-2 MS	OB-7-082118	Total/NA	Water	9012B	
460-163149-2 MSD	OB-7-082118	Total/NA	Water	9012B	
460-163149-11 MS	RW-16-082118	Total/NA	Water	9012B	
460-163149-11 MSD	RW-16-082118	Total/NA	Water	9012B	

Analysis Batch: 548643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-2	OB-7-082118	Total/NA	Water	9012B	548572
460-163149-3	OB-6-082118	Total/NA	Water	9012B	548572
460-163149-4	OB-4-082118	Total/NA	Water	9012B	548572
460-163149-5	OB-16-082118	Total/NA	Water	9012B	548572
460-163149-6	OB-18-082118	Total/NA	Water	9012B	548572
460-163149-7	OB-17-082118	Total/NA	Water	9012B	548572
460-163149-8	Dup-01-082118	Total/NA	Water	9012B	548572
460-163149-9	OB-28-082118	Total/NA	Water	9012B	548572
460-163149-10	OB-22-082118	Total/NA	Water	9012B	548572
460-163149-11	RW-16-082118	Total/NA	Water	9012B	548572
460-163149-12	OB-14A-082118	Total/NA	Water	9012B	548572
460-163149-13	OB-14B-082118	Total/NA	Water	9012B	548572
460-163149-14	FB-01-082118	Total/NA	Water	9012B	548572
460-163149-16	OB-23-082118	Total/NA	Water	9012B	548572
460-163149-17	OB-3-082218	Total/NA	Water	9012B	548572
460-163149-18	OB-24-082218	Total/NA	Water	9012B	548572
MB 460-548572/1-A	Method Blank	Total/NA	Water	9012B	548572
LCS 460-548572/2-A	Lab Control Sample	Total/NA	Water	9012B	548572
460-163149-2 MS	OB-7-082118	Total/NA	Water	9012B	548572
460-163149-2 MSD	OB-7-082118	Total/NA	Water	9012B	548572
460-163149-11 MS	RW-16-082118	Total/NA	Water	9012B	548572
460-163149-11 MSD	RW-16-082118	Total/NA	Water	9012B	548572

Client Sample ID: OB-25-082118

Lab Sample ID: 460-163149-1

Date Collected: 08/21/18 10:35

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547498	08/26/18 07:02	XXC	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 12:06	SZD	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D		1	547427	08/26/18 02:57	SK	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	547560	08/26/18 20:04	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 15:50	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/25/18 23:31	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 10:41	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	50	547688	08/27/18 05:13	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 01:37	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 08:49	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 15:55	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:33	RBS	TAL EDI
Total/NA	Prep	7470A			547148	08/24/18 12:15	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 14:53	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 12:45	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 10:46	PHM	TAL EDI

Client Sample ID: OB-7-082118

Lab Sample ID: 460-163149-2

Date Collected: 08/21/18 12:50

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547498	08/26/18 06:40	XXC	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 12:29	SZD	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D		1	547427	08/25/18 22:25	SK	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	547693	08/27/18 20:16	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 14:21	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/25/18 23:07	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 10:52	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	10	547688	08/27/18 05:27	YXZ	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	547435	08/25/18 03:47	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	547983	08/27/18 21:32	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 08:49	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 15:36	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 15:51	RBS	TAL EDI
Total/NA	Prep	7470A			547148	08/24/18 12:15	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 14:38	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:17	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 09:48	PHM	TAL EDI

Client Sample ID: OB-6-082118

Date Collected: 08/21/18 15:15
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547498	08/26/18 07:25	XXC	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 12:53	SZD	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D		1	547427	08/25/18 23:28	SK	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	547693	08/27/18 20:37	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 16:08	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/25/18 23:54	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 11:37	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	10	547688	08/27/18 06:20	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 16:59	MDC	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 08:49	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 15:58	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 15:58	RBS	TAL EDI
Total/NA	Prep	7470A			547148	08/24/18 12:15	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 14:55	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:20	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 10:53	PHM	TAL EDI

Client Sample ID: OB-4-082118

Lab Sample ID: 460-163149-4

Date Collected: 08/21/18 16:35

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547498	08/26/18 07:47	XXC	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 13:16	SZD	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D		1	547427	08/25/18 23:49	SK	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	547560	08/26/18 16:55	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 16:26	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 00:18	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 12:11	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	100	547688	08/27/18 06:59	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	547435	08/25/18 04:15	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 08:49	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 16:00	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:00	RBS	TAL EDI
Total/NA	Prep	7470A			547148	08/24/18 12:15	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 14:57	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:21	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 11:00	PHM	TAL EDI

Client Sample ID: OB-16-082118

Lab Sample ID: 460-163149-5

Date Collected: 08/21/18 09:35

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547498	08/26/18 08:09	XXC	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 13:39	SZD	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D		1	547427	08/26/18 00:10	SK	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	547560	08/26/18 17:16	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 16:44	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 00:41	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 12:23	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	20	547688	08/27/18 07:13	YXZ	TAL EDI

Client Sample ID: OB-16-082118

Lab Sample ID: 460-163149-5

Date Collected: 08/21/18 09:35

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	547435	08/25/18 04:22	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 09:26	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 16:03	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:05	RBS	TAL EDI
Total/NA	Prep	7470A			547148	08/24/18 12:15	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 14:58	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:25	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 11:10	PHM	TAL EDI

Client Sample ID: OB-18-082118

Lab Sample ID: 460-163149-6

Date Collected: 08/21/18 10:00

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547498	08/26/18 08:31	XXC	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 14:02	SZD	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D		1	547427	08/26/18 00:31	SK	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	547693	08/27/18 20:58	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 17:02	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 01:04	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 12:34	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 01:49	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 09:26	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 16:06	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:07	RBS	TAL EDI
Total/NA	Prep	7470A			547148	08/24/18 12:15	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 15:00	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:26	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 11:17	PHM	TAL EDI

Client Sample ID: OB-17-082118

Lab Sample ID: 460-163149-7

Date Collected: 08/21/18 12:05

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547498	08/26/18 08:54	XXC	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 14:26	SZD	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D		1	547427	08/26/18 00:51	SK	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	547560	08/26/18 17:58	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 17:20	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 01:28	JXZ	TAL EDI
Total/NA	Analysis	9056A	DL	5	547688	08/27/18 07:26	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	547435	08/25/18 04:32	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 09:26	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 16:08	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:08	RBS	TAL EDI
Total/NA	Prep	7470A			547148	08/24/18 12:15	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 15:02	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:27	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 11:26	PHM	TAL EDI

Client Sample ID: Dup-01-082118

Lab Sample ID: 460-163149-8

Date Collected: 08/21/18 12:00

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547498	08/26/18 09:16	XXC	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 14:49	SZD	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D		1	547427	08/26/18 01:12	SK	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	547560	08/26/18 18:19	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 17:38	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 01:51	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 12:56	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI

Client Sample ID: Dup-01-082118

Lab Sample ID: 460-163149-8

Date Collected: 08/21/18 12:00

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020B		2	548548	08/30/18 01:56	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 09:26	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 16:11	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:10	RBS	TAL EDI
Total/NA	Prep	7470A			547148	08/24/18 12:15	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 15:07	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:28	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 11:33	PHM	TAL EDI

Client Sample ID: OB-28-082118

Lab Sample ID: 460-163149-9

Date Collected: 08/21/18 12:35

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547498	08/26/18 09:39	XXC	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 15:12	SZD	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D		1	547427	08/26/18 01:33	SK	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	547560	08/26/18 18:40	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 17:55	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 02:14	JXZ	TAL EDI
Total/NA	Analysis	9056A	DL2	50	547688	08/27/18 07:40	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	5	547688	08/27/18 07:53	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	547435	08/25/18 04:39	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 09:26	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 16:16	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:12	RBS	TAL EDI
Total/NA	Prep	7470A			547144	08/24/18 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 14:19	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:29	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 11:43	PHM	TAL EDI

Client Sample ID: OB-22-082118

Date Collected: 08/21/18 13:35
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547498	08/26/18 10:01	XXC	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 15:36	SZD	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D		1	547427	08/26/18 01:54	SK	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	547560	08/26/18 19:01	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 18:13	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 02:38	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 13:19	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	10	547688	08/27/18 08:07	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 02:03	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 09:26	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 16:27	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:30	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:14	RBS	TAL EDI
Total/NA	Prep	7470A			547144	08/24/18 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 14:21	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:30	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 11:50	PHM	TAL EDI

Client Sample ID: RW-16-082118

Date Collected: 08/21/18 16:45
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547593	08/27/18 00:57	MZS	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 15:59	SZD	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D		1	547427	08/26/18 02:15	SK	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	547560	08/26/18 19:22	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 18:31	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 03:01	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 13:30	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	20	547688	08/27/18 08:20	YXZ	TAL EDI

Client Sample ID: RW-16-082118

Lab Sample ID: 460-163149-11

Date Collected: 08/21/18 16:45

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 02:30	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 09:26	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 16:29	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:15	RBS	TAL EDI
Total/NA	Prep	7470A			547144	08/24/18 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 13:48	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:31	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 11:58	PHM	TAL EDI

Client Sample ID: OB-14A-082118

Lab Sample ID: 460-163149-12

Date Collected: 08/21/18 14:45

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547593	08/27/18 01:19	MZS	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 16:23	SZD	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D		1	547427	08/26/18 02:36	SK	TAL EDI
Total/NA	Prep	3510C			547339	08/25/18 07:09	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	547560	08/26/18 19:43	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 18:49	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 03:25	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 13:42	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	10	547688	08/27/18 08:34	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	547435	08/25/18 05:03	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	547983	08/27/18 22:00	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 09:26	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 16:32	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:17	RBS	TAL EDI
Total/NA	Prep	7470A			547144	08/24/18 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 14:26	RBS	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:33	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 12:05	PHM	TAL EDI

Client Sample ID: OB-14B-082118

Lab Sample ID: 460-163149-13

Date Collected: 08/21/18 15:50

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547593	08/27/18 01:41	MZS	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 16:46	SZD	TAL EDI
Total/NA	Prep	3510C			547376	08/25/18 10:11	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547472	08/26/18 03:28	SK	TAL EDI
Total/NA	Prep	3510C			547376	08/25/18 10:11	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547488	08/26/18 02:51	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 19:07	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 03:48	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 13:53	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	20	547688	08/27/18 08:47	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 02:41	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 09:26	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 16:35	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:19	RBS	TAL EDI
Total/NA	Prep	7470A			547144	08/24/18 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 14:27	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:38	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 12:15	PHM	TAL EDI

Client Sample ID: FB-01-082118

Lab Sample ID: 460-163149-14

Date Collected: 08/21/18 10:40

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547593	08/27/18 00:35	MZS	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 10:09	SZD	TAL EDI
Total/NA	Prep	3510C			547376	08/25/18 10:11	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547472	08/26/18 03:49	SK	TAL EDI
Total/NA	Prep	3510C			547376	08/25/18 10:11	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547488	08/26/18 03:12	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI

Client Sample ID: FB-01-082118

Lab Sample ID: 460-163149-14

Date Collected: 08/21/18 10:40

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 19:24	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 04:11	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 14:27	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	547435	08/25/18 05:17	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	547983	08/27/18 22:10	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 09:26	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 16:37	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:20	RBS	TAL EDI
Total/NA	Prep	7470A			547144	08/24/18 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 14:29	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:38	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 13:01	PHM	TAL EDI

Client Sample ID: TB-01-082218

Lab Sample ID: 460-163149-15

Date Collected: 08/22/18 00:00

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547593	08/26/18 22:21	MZS	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 10:33	SZD	TAL EDI

Client Sample ID: OB-23-082118

Lab Sample ID: 460-163149-16

Date Collected: 08/21/18 14:55

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547593	08/27/18 02:03	MZS	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 17:09	SZD	TAL EDI
Total/NA	Prep	3510C			547376	08/25/18 10:11	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547472	08/26/18 04:10	SK	TAL EDI
Total/NA	Prep	3510C			547376	08/25/18 10:11	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547488	08/26/18 03:33	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 19:42	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI

Client Sample ID: OB-23-082118

Date Collected: 08/21/18 14:55
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082A		1	547439	08/26/18 04:35	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 14:38	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	20	547688	08/27/18 09:00	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	547435	08/25/18 05:20	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	547983	08/27/18 22:14	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 09:26	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 16:40	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:32	RBS	TAL EDI
Total/NA	Prep	7470A			547144	08/24/18 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 14:31	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:39	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 13:09	PHM	TAL EDI

Client Sample ID: OB-3-082218

Date Collected: 08/22/18 10:00
Date Received: 08/22/18 16:45

Lab Sample ID: 460-163149-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547498	08/26/18 10:23	XXC	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 17:33	SZD	TAL EDI
Total/NA	Prep	3510C			547376	08/25/18 10:11	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547472	08/26/18 04:31	SK	TAL EDI
Total/NA	Prep	3510C			547376	08/25/18 10:11	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547488	08/26/18 03:54	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 20:00	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 04:58	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 14:50	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 02:48	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 09:26	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 17:04	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI

Client Sample ID: OB-3-082218

Lab Sample ID: 460-163149-17

Date Collected: 08/22/18 10:00

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	547830	08/27/18 16:35	RBS	TAL EDI
Total/NA	Prep	7470A			547144	08/24/18 12:06	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 14:33	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:40	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 13:17	PHM	TAL EDI

Client Sample ID: OB-24-082218

Lab Sample ID: 460-163149-18

Date Collected: 08/22/18 10:25

Matrix: Water

Date Received: 08/22/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547498	08/26/18 10:45	XXC	TAL EDI
Total/NA	Analysis	8260C SIM		1	547015	08/24/18 17:56	SZD	TAL EDI
Total/NA	Prep	3510C			547376	08/25/18 10:11	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547472	08/26/18 04:52	SK	TAL EDI
Total/NA	Prep	3510C			547376	08/25/18 10:11	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547488	08/26/18 04:15	SK	TAL EDI
Total/NA	Prep	3510C			547073	08/24/18 09:07	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547155	08/24/18 20:18	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 05:22	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547536	08/26/18 15:01	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	25	547688	08/27/18 10:06	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547291	08/24/18 23:32	VAD	TAL EDI
Dissolved	Prep	3010A			547300	08/25/18 00:02	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 02:55	VAD	TAL EDI
Total/NA	Prep	3010A			548003	08/28/18 09:26	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548089	08/28/18 17:06	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			547750	08/27/18 11:24	RBS	TAL EDI
Dissolved	Prep	7470A			547764	08/27/18 12:59	RBS	TAL EDI
Dissolved	Analysis	7470A		1	547830	08/27/18 16:37	RBS	TAL EDI
Total/NA	Prep	7470A			547148	08/24/18 12:15	RBS	TAL EDI
Total/NA	Analysis	7470A		1	547209	08/24/18 14:51	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:41	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547224	08/24/18 13:24	PHM	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	12028	06-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	Ethylene Dibromide
8270D SIM	3510C	Water	Bis(2-chloroethyl)ether
9056A		Water	Chloride
9056A		Water	Sulfate

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL EDI
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
9056A	Anions, Ion Chromatography	SW846	TAL EDI
6020B	Metals (ICP/MS)	SW846	TAL EDI
7470A	Mercury (CVAA)	SW846	TAL EDI
9012B	Cyanide, Total andor Amenable	SW846	TAL EDI
SM 2320B	Alkalinity	SM	TAL EDI
3010A	Preparation, Total Metals	SW846	TAL EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI
7470A	Preparation, Mercury	SW846	TAL EDI
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL EDI
FILTRATION	Sample Filtration	None	TAL EDI

Protocol References:

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163149-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-163149-1	OB-25-082118	Water	08/21/18 10:35	08/22/18 16:45
460-163149-2	OB-7-082118	Water	08/21/18 12:50	08/22/18 16:45
460-163149-3	OB-6-082118	Water	08/21/18 15:15	08/22/18 16:45
460-163149-4	OB-4-082118	Water	08/21/18 16:35	08/22/18 16:45
460-163149-5	OB-16-082118	Water	08/21/18 09:35	08/22/18 16:45
460-163149-6	OB-18-082118	Water	08/21/18 10:00	08/22/18 16:45
460-163149-7	OB-17-082118	Water	08/21/18 12:05	08/22/18 16:45
460-163149-8	Dup-01-082118	Water	08/21/18 12:00	08/22/18 16:45
460-163149-9	OB-28-082118	Water	08/21/18 12:35	08/22/18 16:45
460-163149-10	OB-22-082118	Water	08/21/18 13:35	08/22/18 16:45
460-163149-11	RW-16-082118	Water	08/21/18 16:45	08/22/18 16:45
460-163149-12	OB-14A-082118	Water	08/21/18 14:45	08/22/18 16:45
460-163149-13	OB-14B-082118	Water	08/21/18 15:50	08/22/18 16:45
460-163149-14	FB-01-082118	Water	08/21/18 10:40	08/22/18 16:45
460-163149-15	TB-01-082218	Water	08/22/18 00:00	08/22/18 16:45
460-163149-16	OB-23-082118	Water	08/21/18 14:55	08/22/18 16:45
460-163149-17	OB-3-082218	Water	08/22/18 10:00	08/22/18 16:45
460-163149-18	OB-24-082218	Water	08/22/18 10:25	08/22/18 16:45

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THE LEADER IN ENVIRONMENTAL TESTING

460-163149 Chain of Custody

CHAIN OF CUSTODY REQUEST

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

8/31/2018

Page 1 of 2

Name (for report and invoice): Tim Roeper	Samplers Name (Printed): Robert Lautenberg	Site/Project Identification: Ringwood
Company: Cornerstone Environmental Group	P. O. #: 180361-006	State (Location of site): NJ: ☒ NY: ☐ Other:
Address: 100 Crystal Run Rd, Suite 101	Analysis Turnaround Time: Standard ☒	Regulatory Program: DKQP: ☐
City: Middletown State: NY 10941	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: 845 695 0200 Fax:		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 163149

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs + TICs w SPK	TCL BNAs w SPK	1,4 Dioxane by Isotope Dilution	PCBs	Chloride	Sulfate	Alkalinity	TAL Metals	Dissolved TAL Metals	Total Cyanide		Sample Numbers
OB-25-082118	8/21/18	10:35	GW	15	X	X	X	X	X	X	X	X	X	X		1
OB-7-082118	8/21/18	12:50	GW	15	X	X	X	X	X	X	X	X	X	X		2
OB-7-082118 MS	8/21/18	12:50	GW	15	X	X	X	X	X	X	X	X	X	X		2
OB-7-082118 MSD	8/21/18	12:50	GW	15	X	X	X	X	X	X	X	X	X	X		2
OB-6-082118	8/21/18	15:15	GW	15	X	X	X	X	X	X	X	X	X	X		3
OB-4-082118	8/21/18	16:35	GW	15	X	X	X	X	X	X	X	X	X	X		4
OB-16-082118	8/21/18	9:35	GW	15	X	X	X	X	X	X	X	X	X	X		5
OB-18-082118	8/21/18	10:00	GW	15	X	X	X	X	X	X	X	X	X	X		6
OB-17-082118	8/21/18	12:05	GW	15	X	X	X	X	X	X	X	X	X	X		7
Dup-01-082118	8/21/18	12:00	GW	15	X	X	X	X	X	X	X	X	X	X		8
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:																
6 = Other _____, 7 = Other _____ — Water:					2	1	1	1	1	1	1	4	1	5		

Special Instructions

Water Metals Filtered (Yes/No)? No

Relinquished by	Company	Date / Time	Received by	Company
1)	Cornerstone	8/22/18 10:55	1) TIM YAP	TA EDISON
2) TIM YAP	TA EDISON	8/22/18 1645	2) Kelly	TA Edi
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

IR # 9 2.7°C 0.8°C 0.5°C 0.7°C 0.9°C 0.8°C 1.1°C

NOCS

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

8/31/2018

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CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Tim Roeper	Samplers Name (Printed): Robert Lautenberg	Site/Project Identification: Ringwood
Company: Cornerstone Environmental Group	P. O. #: 180361-006	State (Location of site): NJ: X NY: Other:
		Regulatory Program: DKQP:
Address: 100 Crystal Run Rd., Suite 101	Analysis Turnaround Time: Standard X	
City: Middletown State: NY 10941	Rush Charges Authorized For: 2 Week / 1 Week / Other	
Phone: 845 695 0200 Fax:		

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOC+15 TICs w STARS	TCL BNA/SVOC w STARS	1,4 Dioxane by Isotope Dilution	PCBs	Chloride	Sulfate	Alkalinity	TAL Metals	Dissolved TAL Metals	Total Cyanide	Sample Numbers
OB-28-082118	8/21/18	12:35	GW	15	X	X	X	X	X	X	X	X	X	X	9
OB-22-082118	8/21/18	13:35	GW	15	X	X	X	X	X	X	X	X	X	X	10
RW-16-082118	8/21/18	16:45	GW	15	X	X	X	X	X	X	X	X	X	X	11
OB-14A-082118	8/21/18	14:45	GW	15	X	X	X	X	X	X	X	X	X	X	12
OB-14B-082118	8/21/18	15:50	GW	15	X	X	X	X	X	X	X	X	X	X	13
FB-01-082118	8/21/18	10:40	BW	15	X	X	X	X	X	X	X	X	X	X	14
TB-01-082218	8/22/18	-	BW	3	X										15
OB-23-082118	8/21/18	14:55	GW	15	X	X	X	X	X	X	X	X	X	X	16
OB-3-082218	8/22/18	10:00	GW	15	X	X	X	X	X	X	X	X	X	X	17
OB-24-082218	8/22/18	10:25	GW	15	X	X	X	X	X	X	X	X	X	X	18
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:															
6 = Other _____, 7 = Other _____ — Water:					2	1	1	1	1	1	1	4	1	5	

LAB USE ONLY
Project No:
Job No: 163149

Special Instructions

Water Metals Filtered (Yes/No)? No

Relinquished by	Company	Date / Time	Received by	Company
1)	Cornerstone	8/22/18 1055	1) Tim Yap	TA Edison
Relinquished by 2) Tim Yap	Company TA Edison	Date / Time 8/22/18 1645	Received by 2)	Company TA Edison
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

IR # 9

2.7 °C 0.8 °C 0.5 °C 0.7 °C
0.9 °C 0.8 °C 1.1 °C

NOCS

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 163149

Number of Coolers: 7 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.7 °C	2.7 °C	Cooler #4:	0.7 °C	0.7 °C	Cooler #7:	1.1 °C	1.1 °C
Cooler #2:	0.8 °C	0.8 °C	Cooler #5:	0.9 °C	0.9 °C	Cooler #8:	°C	°C
Cooler #3:	0.5 °C	0.5 °C	Cooler #6:	0.8 °C	0.8 °C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1				<2								>12			
2				<2								>12			
2DUP/MSD				<2								>12			
2MS				<2								>12			
3				<2								>12			
4				<2								>12			
5				<2								>12			
6				<2								>12			
7				<2								>12			
8				<2								>12			
9				<2								>12			
10				<2								>12			
11				<2								>12			

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: TY **Date:** 8/22/18

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 163149

Number of Coolers: 7 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.7 °C	2.7 °C	Cooler #4:	0.7 °C	0.7 °C	Cooler #7:	1.1 °C	1.1 °C
Cooler #2:	0.8 °C	0.8 °C	Cooler #5:	0.9 °C	0.9 °C	Cooler #8:	°C	°C
Cooler #3:	0.5 °C	0.5 °C	Cooler #6:	0.8 °C	0.8 °C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
12				<2								>12			
13				<2								>12			
14				<2								>12			
16				<2								>12			
17				<2								>12			
18				<2								>12			

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: TY Date: 8/22/18

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 460-163149-1

Login Number: 163149
List Number: 1
Creator: Rivera, Kenneth

List Source: TestAmerica Edison

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-163188-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Dr. Tim Roeper

Authorized for release by:
8/31/2018 9:35:46 AM

Marie Meidhof, Senior Project Manager
(732)549-3900
marie.meidhof@testamericainc.com

LINKS

Review your project results through TotalAccess

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

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-163188-1

Laboratory: TestAmerica Edison

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 460-163188-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 8/23/2018 11:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.8º C, 1.1º C, 1.2º C, 1.2º C and 1.5º C.

Receipt Exceptions

The following samples were listed on the Chain of Custody (COC), however, no samples were received: OB-3 and OB-24. These samples were received in the first delivery group, and are logged in and are being analyzed as 460-163149-17 and 460-163149-18.

One of the vials for the following sample was received empty: OB-33-082218 (460-163188-6). There is sufficient remaining volume to run the requested VOC analyses.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples OB-13-082218 (460-163188-2), OB-10-082218 (460-163188-3), OB-29-082218 (460-163188-4), OB-15B-082218 (460-163188-5), OB-33-082218 (460-163188-6), OB-32-082218 (460-163188-7), OB-19-082218 (460-163188-9), OB-11R-082218 (460-163188-10), RW-5A-082218 (460-163188-11), OB-21-082218 (460-163188-12), OB-27-082218 (460-163188-13), OB-30B-082218 (460-163188-14), OB-31-082218 (460-163188-15), RW-7-082218 (460-163188-16), TB-02-082318 (460-163188-17) and FB-03-082318 (460-163188-18) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C DKQP. The samples were analyzed on 08/27/2018 and 08/28/2018.

Methyl acetate failed the recovery criteria high for the matrix spike (MS) and matrix spike duplicate (MSD) of sample 460-163158-1 in batch 460-547649.

Acetone exceeded the RPD limit for the MSD of sample 460-163302-5 in batch 460-548123.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Job ID: 460-163188-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) DKQP

Samples OB-13-082218 (460-163188-2), OB-10-082218 (460-163188-3), OB-29-082218 (460-163188-4), OB-15B-082218 (460-163188-5), OB-33-082218 (460-163188-6), OB-32-082218 (460-163188-7), OB-19-082218 (460-163188-9), OB-11R-082218 (460-163188-10), RW-5A-082218 (460-163188-11), OB-21-082218 (460-163188-12), OB-27-082218 (460-163188-13), OB-30B-082218 (460-163188-14), OB-31-082218 (460-163188-15), RW-7-082218 (460-163188-16) and FB-03-082318 (460-163188-18) were analyzed for Semivolatile organic compounds (GC/MS) DKQP in accordance with EPA SW-846 Method 8270D DKQP. The samples were prepared on 08/25/2018 and 08/28/2018 and analyzed on 08/26/2018 and 08/29/2018.

The continuing calibration verification (CCV) associated with batch 460-547548 recovered above the upper control limit for 4-Nitrophenol and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The laboratory control sample (LCS) and lab control sample duplicate (LCSD) associated with preparation batch 460-547375 and analytical batch 460-547548 was outside DKQP recovery criteria but with laboratory generated limits for the following analyte: 2-Methylphenol. The data has been reported. 2-Methylphenol failed the recovery criteria low for LCS 460-547375/2-A and LCSD 460-547375/3-A.

The LCS associated with preparation batch 460-547375 and analytical batch 460-547548 was outside DKQP recovery criteria but with laboratory generated limits for the following analyte: Caprolactam. The data has been reported. Caprolactam failed the recovery criteria low for LCS 460-547375/4-A.

The LCSD for preparation batch 460-547375 and analytical batch 460-547548 recovered outside control limits for the following analytes: Atrazine and Benzaldehyde. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 460-547375 and analytical batch 460-547548 recovered outside control limits for the following analytes: Atrazine, Benzaldehyde and Caprolactam.

The following LCS associated with batch 460-548149 contained one acid/base surrogate outside acceptance limits:(LCS 460-548149/2-A). The laboratory's SOP allows one acid and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified. 2,4,6-Tribromophenol (Surr) failed the surrogate recovery criteria high for LCS 460-548149/2-A.

Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: OB-30B-082218 (460-163188-14). These results have been reported and qualified. 2,4,6-Tribromophenol (Surr) failed the surrogate recovery criteria high for OB-30B-082218 (460-163188-14).

2-Methylphenol and 3-Nitroaniline failed the recovery criteria low for the MS and MSD of sample 460-163302-21 in batch 460-548257.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM)

Samples OB-13-082218 (460-163188-2), OB-10-082218 (460-163188-3), OB-29-082218 (460-163188-4), OB-15B-082218

Job ID: 460-163188-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

(460-163188-5), OB-33-082218 (460-163188-6), OB-32-082218 (460-163188-7), OB-19-082218 (460-163188-9), OB-11R-082218 (460-163188-10), RW-5A-082218 (460-163188-11), OB-21-082218 (460-163188-12), OB-27-082218 (460-163188-13), OB-30B-082218 (460-163188-14), OB-31-082218 (460-163188-15), RW-7-082218 (460-163188-16) and FB-03-082318 (460-163188-18) were analyzed for semivolatile organic compounds - Selected Ion Mode (SIM) in accordance with EPA Method 8270C SIM DKQP. The samples were prepared on 08/25/2018 and 08/28/2018 and analyzed on 08/26/2018 and 08/29/2018.

The CCV analyzed in batch 460-547568 was outside the method criteria for the following analytes: Dibenz(a,h)anthracene, Hexachlorobenzene and Pentachlorophenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The CCV associated with batch 460-548270 recovered above the upper control limit for Dibenz(a,h)anthracene and Pentachlorophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The LCS and LCSD for preparation batch 460-548149 and analytical batch 460-548270 recovered outside control limits for the following analyte: Dibenz(a,h)anthracene. This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

1,4 DIOXANE BY 8270D SIM, ISOTOPE DILUTION

Samples OB-13-082218 (460-163188-2), OB-10-082218 (460-163188-3), OB-29-082218 (460-163188-4), OB-15B-082218 (460-163188-5), OB-33-082218 (460-163188-6), OB-32-082218 (460-163188-7), OB-19-082218 (460-163188-9), OB-11R-082218 (460-163188-10), RW-5A-082218 (460-163188-11), OB-21-082218 (460-163188-12), OB-27-082218 (460-163188-13), OB-30B-082218 (460-163188-14), OB-31-082218 (460-163188-15), RW-7-082218 (460-163188-16) and FB-03-082318 (460-163188-18) were analyzed for 1,4 Dioxane by 8270D SIM, Isotope Dilution in accordance with EPA SW-846 Method 8270D SIM. The samples were prepared on 08/25/2018 and analyzed on 08/26/2018.

No difficulties were encountered during the 1,4 Dioxane analysis.

All quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS) - SELECTED ION MODE (SIM) DKQP

Samples OB-13-082218 (460-163188-2), OB-10-082218 (460-163188-3), OB-29-082218 (460-163188-4), OB-15B-082218 (460-163188-5), OB-33-082218 (460-163188-6), OB-32-082218 (460-163188-7), OB-19-082218 (460-163188-9), OB-11R-082218 (460-163188-10), RW-5A-082218 (460-163188-11), OB-21-082218 (460-163188-12), OB-27-082218 (460-163188-13), OB-30B-082218 (460-163188-14), OB-31-082218 (460-163188-15), RW-7-082218 (460-163188-16), TB-02-082318 (460-163188-17) and FB-03-082318 (460-163188-18) were analyzed for volatile organic compounds (GC-MS) - Selected Ion Mode (SIM) DKQP in accordance with EPA SW-846 Method 8260C SIM DKQP. The samples were analyzed on 08/28/2018 and 08/29/2018.

The CCV associated with batch 460-548240 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

Refer to the QC report for details.

No other difficulties were encountered during the VOA SIM DKQP analysis.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS) DKQP

Samples OB-13-082218 (460-163188-2), OB-10-082218 (460-163188-3), OB-29-082218 (460-163188-4), OB-15B-082218

Job ID: 460-163188-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

(460-163188-5), OB-33-082218 (460-163188-6), OB-32-082218 (460-163188-7), OB-19-082218 (460-163188-9), OB-11R-082218 (460-163188-10), RW-5A-082218 (460-163188-11), OB-21-082218 (460-163188-12), OB-27-082218 (460-163188-13), OB-30B-082218 (460-163188-14), OB-31-082218 (460-163188-15), RW-7-082218 (460-163188-16) and FB-03-082318 (460-163188-18) were analyzed for polychlorinated biphenyls (PCBs) DKQP in accordance with EPA SW-846 Method 8082A DKQP. The samples were prepared on 08/24/2018 and analyzed on 08/25/2018 and 08/26/2018.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICP/MS)

Samples OB-13-082218 (460-163188-2), OB-10-082218 (460-163188-3), OB-29-082218 (460-163188-4), OB-15B-082218 (460-163188-5), OB-33-082218 (460-163188-6), OB-32-082218 (460-163188-7), OB-19-082218 (460-163188-9), OB-11R-082218 (460-163188-10), RW-5A-082218 (460-163188-11), OB-21-082218 (460-163188-12), OB-27-082218 (460-163188-13), OB-30B-082218 (460-163188-14), OB-31-082218 (460-163188-15), RW-7-082218 (460-163188-16) and FB-03-082318 (460-163188-18) were analyzed for Dissolved Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared on 08/27/2018 and analyzed on 08/27/2018 and 08/30/2018.

Samples OB-13-082218 (460-163188-2)[10X], OB-13-082218 (460-163188-2)[2X], OB-10-082218 (460-163188-3)[2X], OB-29-082218 (460-163188-4)[2X], OB-15B-082218 (460-163188-5)[2X], OB-33-082218 (460-163188-6)[2X], OB-32-082218 (460-163188-7)[2X], OB-19-082218 (460-163188-9)[2X], OB-11R-082218 (460-163188-10)[2X], RW-5A-082218 (460-163188-11)[2X], OB-21-082218 (460-163188-12)[2X], OB-27-082218 (460-163188-13)[2X], OB-30B-082218 (460-163188-14)[2X], OB-31-082218 (460-163188-15)[2X], RW-7-082218 (460-163188-16)[2X] and FB-03-082318 (460-163188-18)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the Dissolved Metals analysis.

All quality control parameters were within the acceptance limits.

METALS (ICP/MS)

Samples OB-13-082218 (460-163188-2), OB-10-082218 (460-163188-3), OB-29-082218 (460-163188-4), OB-15B-082218 (460-163188-5), OB-33-082218 (460-163188-6), OB-32-082218 (460-163188-7), OB-19-082218 (460-163188-9), OB-11R-082218 (460-163188-10), RW-5A-082218 (460-163188-11), OB-21-082218 (460-163188-12), OB-27-082218 (460-163188-13), OB-30B-082218 (460-163188-14), OB-31-082218 (460-163188-15), RW-7-082218 (460-163188-16) and FB-03-082318 (460-163188-18) were analyzed for Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared on 08/29/2018 and analyzed on 08/29/2018 and 08/30/2018.

Sample OB-11R-082218 (460-163188-10)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the Metals DKQP analysis.

All quality control parameters were within the acceptance limits.

MERCURY DKQP

Samples OB-13-082218 (460-163188-2), OB-10-082218 (460-163188-3), OB-29-082218 (460-163188-4), OB-15B-082218 (460-163188-5), OB-33-082218 (460-163188-6), OB-32-082218 (460-163188-7), OB-19-082218 (460-163188-9), OB-11R-082218 (460-163188-10), RW-5A-082218 (460-163188-11), OB-21-082218 (460-163188-12), OB-27-082218 (460-163188-13), OB-30B-082218 (460-163188-14), OB-31-082218 (460-163188-15), RW-7-082218 (460-163188-16) and FB-03-082318 (460-163188-18) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 08/28/2018.

No difficulties were encountered during the dissolved Hg analysis.

All quality control parameters were within the acceptance limits.

MERCURY DKQP

Job ID: 460-163188-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Samples OB-13-082218 (460-163188-2), OB-10-082218 (460-163188-3), OB-29-082218 (460-163188-4), OB-15B-082218 (460-163188-5), OB-33-082218 (460-163188-6), OB-32-082218 (460-163188-7), OB-19-082218 (460-163188-9), OB-11R-082218 (460-163188-10), RW-5A-082218 (460-163188-11), OB-21-082218 (460-163188-12), OB-27-082218 (460-163188-13), OB-30B-082218 (460-163188-14), OB-31-082218 (460-163188-15), RW-7-082218 (460-163188-16) and FB-03-082318 (460-163188-18) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 08/28/2018.

No difficulties were encountered during the Hg analysis.

All quality control parameters were within the acceptance limits.

ANIONS

Samples OB-13-082218 (460-163188-2), OB-10-082218 (460-163188-3), OB-29-082218 (460-163188-4), OB-15B-082218 (460-163188-5), OB-33-082218 (460-163188-6), OB-32-082218 (460-163188-7), OB-19-082218 (460-163188-9), OB-11R-082218 (460-163188-10), RW-5A-082218 (460-163188-11), OB-21-082218 (460-163188-12), OB-27-082218 (460-163188-13), OB-30B-082218 (460-163188-14), OB-31-082218 (460-163188-15), RW-7-082218 (460-163188-16) and FB-03-082318 (460-163188-18) were analyzed for anions in accordance with EPA SW-846 Method 9056. The samples were analyzed on 08/26/2018 and 08/27/2018.

Sample OB-30B-082218 (460-163188-14)[8X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the anions analysis.

All quality control parameters were within the acceptance limits.

ALKALINITY

Samples OB-13-082218 (460-163188-2), OB-10-082218 (460-163188-3), OB-29-082218 (460-163188-4), OB-15B-082218 (460-163188-5), OB-33-082218 (460-163188-6), OB-32-082218 (460-163188-7), OB-19-082218 (460-163188-9), OB-11R-082218 (460-163188-10), RW-5A-082218 (460-163188-11), OB-21-082218 (460-163188-12), OB-27-082218 (460-163188-13), OB-30B-082218 (460-163188-14), OB-31-082218 (460-163188-15), RW-7-082218 (460-163188-16) and FB-03-082318 (460-163188-18) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/25/2018 and 08/26/2018.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

TOTAL CYANIDE

Samples OB-13-082218 (460-163188-2), OB-10-082218 (460-163188-3), OB-29-082218 (460-163188-4), OB-15B-082218 (460-163188-5), OB-33-082218 (460-163188-6), OB-32-082218 (460-163188-7), OB-19-082218 (460-163188-9), OB-11R-082218 (460-163188-10), RW-5A-082218 (460-163188-11), OB-21-082218 (460-163188-12), OB-27-082218 (460-163188-13), OB-30B-082218 (460-163188-14), OB-31-082218 (460-163188-15), RW-7-082218 (460-163188-16) and FB-03-082318 (460-163188-18) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B (DKQP). The samples were prepared on 08/28/2018 and 08/30/2018 and analyzed on 08/29/2018 and 08/30/2018.

No difficulties were encountered during the cyanide analysis.

All quality control parameters were within the acceptance limits.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-13-082218 — Lab Sample ID: 460-163188-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.47	J	1.0	0.16	ug/L	1		8260C	Total/NA
Chloride	2.79		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	8.47		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	4.8		4.0	1.1	ug/L	2		6020B	Total/NA
Aluminum	43.1		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3590		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2890		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1300		200	64.9	ug/L	2		6020B	Total/NA
Calcium	7410		200	67.6	ug/L	2		6020B	Total/NA
Barium	4.2		4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	2950		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2580		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1280		200	64.9	ug/L	2		6020B	Dissolved
Calcium	7490		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	25.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	25.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-10-082218 — Lab Sample ID: 460-163188-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.40	J	1.0	0.16	ug/L	1		8260C	Total/NA
Chloride	4.33		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	5.57		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	6.7		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	30.0		8.0	2.7	ug/L	2		6020B	Total/NA
Aluminum	19.2	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3970		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	4340		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1260		200	64.9	ug/L	2		6020B	Total/NA
Calcium	13500		200	67.6	ug/L	2		6020B	Total/NA
Iron	214		120	45.7	ug/L	2		6020B	Total/NA
Barium	6.3		4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	3210		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3810		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1260		200	64.9	ug/L	2		6020B	Dissolved
Calcium	13600		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	47.1		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	47.1		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-29-082218 — Lab Sample ID: 460-163188-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.28	J	1.0	0.16	ug/L	1		8260C	Total/NA
Benzo[a]anthracene	0.036	J	0.052	0.016	ug/L	1		8270D SIM	Total/NA
Benzo[a]pyrene	0.046	J	0.052	0.023	ug/L	1		8270D SIM	Total/NA
Benzo[b]fluoranthene	0.071		0.052	0.025	ug/L	1		8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.076		0.052	0.038	ug/L	1		8270D SIM	Total/NA
Chloride	4.26		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	5.55		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	10.4		4.0	1.1	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-29-082218 (Continued) — Lab Sample ID: 460-163188-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	1.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	2.3	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	23.0		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.6	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.42	J	1.2	0.37	ug/L	2		6020B	Total/NA
Vanadium	1.4	J	4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	624		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3960		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	4490		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1390		200	64.9	ug/L	2		6020B	Total/NA
Calcium	13300		200	67.6	ug/L	2		6020B	Total/NA
Iron	949		120	45.7	ug/L	2		6020B	Total/NA
Barium	6.2		4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	3180		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3780		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1270		200	64.9	ug/L	2		6020B	Dissolved
Calcium	13700		200	67.6	ug/L	2		6020B	Dissolved
Cyanide, Total	0.0027	J	0.010	0.0020	mg/L	1		9012B	Total/NA
Bicarbonate Alkalinity as CaCO3	46.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	46.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-15B-082218 — Lab Sample ID: 460-163188-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.26	J	1.0	0.16	ug/L	1		8260C	Total/NA
Methylene Chloride	0.34	J	1.0	0.32	ug/L	1		8260C	Total/NA
Chloride	1.79		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	12.2		0.60	0.33	mg/L	1		9056A	Total/NA
Arsenic	0.98	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	26.5		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	2380		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	6.1		4.0	1.3	ug/L	2		6020B	Total/NA
Vanadium	2.0	J	4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	67.5		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	4320		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	6190		200	65.7	ug/L	2		6020B	Total/NA
Potassium	704		200	64.9	ug/L	2		6020B	Total/NA
Calcium	21400		200	67.6	ug/L	2		6020B	Total/NA
Iron	423		120	45.7	ug/L	2		6020B	Total/NA
Arsenic	0.82	J	2.0	0.77	ug/L	2		6020B	Dissolved
Manganese	147		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	3540		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	5440		200	65.7	ug/L	2		6020B	Dissolved
Potassium	695		200	64.9	ug/L	2		6020B	Dissolved
Calcium	21900		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	71.0		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	71.0		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-33-082218 — Lab Sample ID: 460-163188-6

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-33-082218 (Continued) — Lab Sample ID: 460-163188-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.73		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	12.6		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	22.8		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	4.9		4.0	1.3	ug/L	2		6020B	Total/NA
Manganese	24.3		8.0	2.7	ug/L	2		6020B	Total/NA
Vanadium	2.0	J	4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	412		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	5890		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	5930		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1060		200	64.9	ug/L	2		6020B	Total/NA
Calcium	12300		200	67.6	ug/L	2		6020B	Total/NA
Iron	519		120	45.7	ug/L	2		6020B	Total/NA
Barium	18.8		4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	4800		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	5090		200	65.7	ug/L	2		6020B	Dissolved
Potassium	944		200	64.9	ug/L	2		6020B	Dissolved
Calcium	12600		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	49.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	49.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-32-082218 — Lab Sample ID: 460-163188-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.21		0.12	0.078	mg/L	1		9056A	Total/NA
Arsenic	14.8		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	46.4		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	6240		8.0	2.7	ug/L	2		6020B	Total/NA
Aluminum	52.1		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3820		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	4410		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2220		200	64.9	ug/L	2		6020B	Total/NA
Calcium	30200		200	67.6	ug/L	2		6020B	Total/NA
Iron	51700		120	45.7	ug/L	2		6020B	Total/NA
Barium	26.2		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	6310		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	3050		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3820		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2190		200	64.9	ug/L	2		6020B	Dissolved
Calcium	29900		200	67.6	ug/L	2		6020B	Dissolved
Iron	2950		120	45.7	ug/L	2		6020B	Dissolved
Cyanide, Total	0.0072	J	0.010	0.0020	mg/L	1		9012B	Total/NA
Bicarbonate Alkalinity as CaCO3	128		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	128		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-19-082218 — Lab Sample ID: 460-163188-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.23	J	1.0	0.16	ug/L	1		8260C	Total/NA
Chloroethane	1.2		1.0	0.32	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.97		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-19-082218 (Continued) — Lab Sample ID: 460-163188-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.51		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	2.03		0.60	0.33	mg/L	1		9056A	Total/NA
Arsenic	0.82	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	103		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	1.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	4.5		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	316		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	1.8		1.2	0.37	ug/L	2		6020B	Total/NA
Vanadium	2.8	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	17.7		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	195		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3350		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	3180		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1180		200	64.9	ug/L	2		6020B	Total/NA
Calcium	15600		200	67.6	ug/L	2		6020B	Total/NA
Iron	22100		120	45.7	ug/L	2		6020B	Total/NA
Barium	98.0		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	291		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	2810		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2830		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1190		200	64.9	ug/L	2		6020B	Dissolved
Calcium	16300		200	67.6	ug/L	2		6020B	Dissolved
Cyanide, Total	0.0025	J	0.010	0.0020	mg/L	1		9012B	Total/NA
Bicarbonate Alkalinity as CaCO3	57.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	57.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-11R-082218 — Lab Sample ID: 460-163188-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.0		1.0	0.43	ug/L	1		8260C	Total/NA
Chloroethane	27		1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.35	J	1.0	0.22	ug/L	1		8260C	Total/NA
Cyclohexane	2.4		1.0	0.32	ug/L	1		8260C	Total/NA
Isopropylbenzene	0.75	J	1.0	0.34	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.67	J	1.0	0.26	ug/L	1		8260C	Total/NA
1,4-Dioxane	3.7		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	2.05		0.12	0.078	mg/L	1		9056A	Total/NA
Arsenic	25.8		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	92.9		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	2.5	J	4.0	1.3	ug/L	2		6020B	Total/NA
Manganese	10800		40.0	13.5	ug/L	10		6020B	Total/NA
Aluminum	109		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	4150		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	7780		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2950		200	64.9	ug/L	2		6020B	Total/NA
Calcium	55800		200	67.6	ug/L	2		6020B	Total/NA
Iron	76100		120	45.7	ug/L	2		6020B	Total/NA
Barium	45.0		4.0	1.1	ug/L	2		6020B	Dissolved
Cobalt	1.9	J	4.0	1.3	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-11R-082218 (Continued) — Lab Sample ID: 460-163188-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	9950		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	3240		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	6520		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2830		200	64.9	ug/L	2		6020B	Dissolved
Calcium	54300		200	67.6	ug/L	2		6020B	Dissolved
Iron	8220		120	45.7	ug/L	2		6020B	Dissolved
Cyanide, Total	0.0061	J	0.010	0.0020	mg/L	1		9012B	Total/NA
Bicarbonate Alkalinity as CaCO3	227		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	227		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-5A-082218 — Lab Sample ID: 460-163188-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.90		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	8.72		0.60	0.33	mg/L	1		9056A	Total/NA
Arsenic	2.1		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	8.5		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	293		8.0	2.7	ug/L	2		6020B	Total/NA
Aluminum	69.1		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	4450		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	5950		200	65.7	ug/L	2		6020B	Total/NA
Potassium	4080		200	64.9	ug/L	2		6020B	Total/NA
Calcium	39800		200	67.6	ug/L	2		6020B	Total/NA
Iron	1000		120	45.7	ug/L	2		6020B	Total/NA
Barium	7.8		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	212		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	3720		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	5370		200	65.7	ug/L	2		6020B	Dissolved
Potassium	4210		200	64.9	ug/L	2		6020B	Dissolved
Calcium	42000		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	129		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	129		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-21-082218 — Lab Sample ID: 460-163188-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.27	J	1.0	0.16	ug/L	1		8260C	Total/NA
Chloride	1.66		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	7.63		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	7.2		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	1.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	9.5		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	87.9		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	2.5	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.70	J	1.2	0.37	ug/L	2		6020B	Total/NA
Vanadium	1.2	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	7.2	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	649		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	4060		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	5030		200	65.7	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-21-082218 (Continued) — Lab Sample ID: 460-163188-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1120		200	64.9	ug/L	2		6020B	Total/NA
Calcium	10300		200	67.6	ug/L	2		6020B	Total/NA
Iron	1190		120	45.7	ug/L	2		6020B	Total/NA
Barium	3.4	J	4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	3390		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	4550		200	65.7	ug/L	2		6020B	Dissolved
Potassium	994		200	64.9	ug/L	2		6020B	Dissolved
Calcium	11100		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	45.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	45.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-27-082218 — Lab Sample ID: 460-163188-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.1		1.0	0.26	ug/L	1		8260C	Total/NA
1,2-Dichloroethane	0.45	J	1.0	0.43	ug/L	1		8260C	Total/NA
Benzene	3.3		1.0	0.43	ug/L	1		8260C	Total/NA
Chloroethane	180		1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.43	J	1.0	0.22	ug/L	1		8260C	Total/NA
Cyclohexane	1.4		1.0	0.32	ug/L	1		8260C	Total/NA
Isopropylbenzene	3.2		1.0	0.34	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.93	J	1.0	0.26	ug/L	1		8260C	Total/NA
Methylene Chloride	1.1		1.0	0.32	ug/L	1		8260C	Total/NA
Toluene	0.48	J	1.0	0.38	ug/L	1		8260C	Total/NA
Vinyl chloride	0.29	J	1.0	0.17	ug/L	1		8260C	Total/NA
Xylenes, Total	7.4		2.0	0.65	ug/L	1		8260C	Total/NA
1,4-Dioxane	17		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Naphthalene	3.2	J	10	1.1	ug/L	1		8270D	Total/NA
Chloride	2.04		0.12	0.078	mg/L	1		9056A	Total/NA
Arsenic	25.4		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	68.2		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	4.4		4.0	1.3	ug/L	2		6020B	Total/NA
Chromium	1.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	3.6	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	6350		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	3.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	1.1	J	1.2	0.37	ug/L	2		6020B	Total/NA
Vanadium	1.6	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	9.2	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	594		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3660		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	4820		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1870		200	64.9	ug/L	2		6020B	Total/NA
Calcium	33300		200	67.6	ug/L	2		6020B	Total/NA
Iron	52300		120	45.7	ug/L	2		6020B	Total/NA
Barium	46.7		4.0	1.1	ug/L	2		6020B	Dissolved
Cobalt	3.3	J	4.0	1.3	ug/L	2		6020B	Dissolved
Manganese	6740		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	1.4	J	4.0	1.3	ug/L	2		6020B	Dissolved
Sodium	2930		200	75.7	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-27-082218 (Continued) — Lab Sample ID: 460-163188-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	4230		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1840		200	64.9	ug/L	2		6020B	Dissolved
Calcium	34800		200	67.6	ug/L	2		6020B	Dissolved
Iron	6620		120	45.7	ug/L	2		6020B	Dissolved
Cyanide, Total	0.0056	J	0.010	0.0020	mg/L	1		9012B	Total/NA
Bicarbonate Alkalinity as CaCO3	159		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	159		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-30B-082218 — Lab Sample ID: 460-163188-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	14.7		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	20.1	D	0.96	0.62	mg/L	8		9056A	Total/NA
Barium	24.1		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	1.7	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	2.8	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	1220		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	2.9	J	4.0	1.3	ug/L	2		6020B	Total/NA
Aluminum	40.3		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	23100		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	4800		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2780		200	64.9	ug/L	2		6020B	Total/NA
Calcium	18800		200	67.6	ug/L	2		6020B	Total/NA
Iron	59.6	J	120	45.7	ug/L	2		6020B	Total/NA
Barium	24.9		4.0	1.1	ug/L	2		6020B	Dissolved
Cobalt	1.3	J	4.0	1.3	ug/L	2		6020B	Dissolved
Copper	2.0	J	4.0	1.9	ug/L	2		6020B	Dissolved
Manganese	1180		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	2.1	J	4.0	1.3	ug/L	2		6020B	Dissolved
Sodium	20900		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	4310		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2800		200	64.9	ug/L	2		6020B	Dissolved
Calcium	19700		200	67.6	ug/L	2		6020B	Dissolved
Cyanide, Total	0.0022	J	0.010	0.0020	mg/L	1		9012B	Total/NA
Bicarbonate Alkalinity as CaCO3	73.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	73.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-31-082218 — Lab Sample ID: 460-163188-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	6.4		1.0	0.32	ug/L	1		8260C	Total/NA
1,4-Dioxane	1.1		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	1.60		0.12	0.078	mg/L	1		9056A	Total/NA
Arsenic	15.0		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	36.8		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	4680		8.0	2.7	ug/L	2		6020B	Total/NA
Aluminum	37.3	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3510		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	3790		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1290		200	64.9	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-31-082218 (Continued) — Lab Sample ID: 460-163188-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	21400		200	67.6	ug/L	2		6020B	Total/NA
Iron	41300		120	45.7	ug/L	2		6020B	Total/NA
Barium	26.3		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	4660		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	2780		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3250		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1250		200	64.9	ug/L	2		6020B	Dissolved
Calcium	20900		200	67.6	ug/L	2		6020B	Dissolved
Iron	2260		120	45.7	ug/L	2		6020B	Dissolved
Cyanide, Total	0.0049	J	0.010	0.0020	mg/L	1		9012B	Total/NA
Bicarbonate Alkalinity as CaCO3	91.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	91.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-7-082218 — Lab Sample ID: 460-163188-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.79		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	8.93		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	2.3	J	4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.4	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	6.5	J	8.0	2.7	ug/L	2		6020B	Total/NA
Lead	0.38	J	1.2	0.37	ug/L	2		6020B	Total/NA
Zinc	7.2	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	224		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	4160		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	4230		200	65.7	ug/L	2		6020B	Total/NA
Potassium	967		200	64.9	ug/L	2		6020B	Total/NA
Calcium	10600		200	67.6	ug/L	2		6020B	Total/NA
Iron	611		120	45.7	ug/L	2		6020B	Total/NA
Barium	1.6	J	4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	3430		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3860		200	65.7	ug/L	2		6020B	Dissolved
Potassium	946		200	64.9	ug/L	2		6020B	Dissolved
Calcium	11300		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	42.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	42.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: TB-02-082318 — Lab Sample ID: 460-163188-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.54	J	1.0	0.16	ug/L	1		8260C	Total/NA

Client Sample ID: FB-03-082318 — Lab Sample ID: 460-163188-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.51	J	1.0	0.16	ug/L	1		8260C	Total/NA
Methylene Chloride	1.5		1.0	0.32	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-13-082218
Date Collected: 08/22/18 12:00
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 06:17	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 06:17	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 06:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*70 - 130*		*08/28/18 06:17*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 12:20	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 12:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 12:20	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 12:20	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 12:20	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 12:20	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 12:20	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 12:20	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 12:20	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 12:20	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 12:20	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 12:20	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 12:20	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 12:20	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 12:20	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 12:20	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 12:20	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 12:20	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 12:20	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 12:20	1
Carbon disulfide	**0.47**	**J**	1.0	0.16	ug/L			08/27/18 12:20	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 12:20	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 12:20	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 12:20	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 12:20	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 12:20	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 12:20	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 12:20	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 12:20	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 12:20	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 12:20	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 12:20	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 12:20	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 12:20	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 12:20	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 12:20	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 12:20	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 12:20	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 12:20	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 12:20	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 12:20	1

Client Sample ID: OB-13-082218
Date Collected: 08/22/18 12:00
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 12:20	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 12:20	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 12:20	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 12:20	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 12:20	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 12:20	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 12:20	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 12:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*08/27/18 12:20*	*1*
4-Bromofluorobenzene	*98*		*70 - 130*		*08/27/18 12:20*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/27/18 12:20*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/27/18 12:20*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/25/18 10:18	08/26/18 01:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*33*		*10 - 150*	*08/25/18 10:18*	*08/26/18 01:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:05	08/26/18 18:51	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:05	08/26/18 18:51	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:05	08/26/18 18:51	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:05	08/26/18 18:51	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:05	08/26/18 18:51	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 10:05	08/26/18 18:51	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:05	08/26/18 18:51	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:05	08/26/18 18:51	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:05	08/26/18 18:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:05	08/26/18 17:57	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:05	08/26/18 17:57	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:05	08/26/18 17:57	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 17:57	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 17:57	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 17:57	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:05	08/26/18 17:57	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 17:57	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:05	08/26/18 17:57	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:05	08/26/18 17:57	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:05	08/26/18 17:57	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:05	08/26/18 17:57	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:05	08/26/18 17:57	1

Client Sample ID: OB-13-082218
Date Collected: 08/22/18 12:00
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:05	08/26/18 17:57	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:05	08/26/18 17:57	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:05	08/26/18 17:57	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:05	08/26/18 17:57	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 17:57	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:05	08/26/18 17:57	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:05	08/26/18 17:57	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 17:57	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:05	08/26/18 17:57	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 17:57	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:05	08/26/18 17:57	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:05	08/26/18 17:57	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:05	08/26/18 17:57	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:05	08/26/18 17:57	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:05	08/26/18 17:57	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 17:57	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 17:57	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:05	08/26/18 17:57	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:05	08/26/18 17:57	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 17:57	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:05	08/26/18 17:57	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:05	08/26/18 17:57	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:05	08/26/18 17:57	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 17:57	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 17:57	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 17:57	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:05	08/26/18 17:57	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 17:57	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 17:57	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:05	08/26/18 17:57	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:05	08/26/18 17:57	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:05	08/26/18 17:57	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:05	08/26/18 17:57	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:05	08/26/18 17:57	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:05	08/26/18 17:57	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 17:57	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 17:57	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:05	08/26/18 17:57	1
Benzaldehyde	0.59	U *	10	0.59	ug/L		08/25/18 10:05	08/26/18 17:57	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:05	08/26/18 17:57	1
Atrazine	1.3	U *	2.0	1.3	ug/L		08/25/18 10:05	08/26/18 17:57	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 17:57	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 17:57	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 17:57	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 17:57	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 17:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:05*	*08/26/18 17:57*	*1*

Client Sample ID: OB-13-082218

Date Collected: 08/22/18 12:00
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-2

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*102*		*30 - 130*	*08/25/18 10:05*	*08/26/18 17:57*	*1*
Phenol-d5 (Surr)	*28*		*15 - 110*	*08/25/18 10:05*	*08/26/18 17:57*	*1*
Terphenyl-d14 (Surr)	*98*		*30 - 130*	*08/25/18 10:05*	*08/26/18 17:57*	*1*
2,4,6-Tribromophenol (Surr)	*106*		*15 - 110*	*08/25/18 10:05*	*08/26/18 17:57*	*1*
2-Fluorophenol (Surr)	*44*		*15 - 110*	*08/25/18 10:05*	*08/26/18 17:57*	*1*
2-Fluorobiphenyl	*86*		*30 - 130*	*08/25/18 10:05*	*08/26/18 17:57*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 05:45	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 05:45	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 05:45	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 05:45	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 05:45	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/26/18 05:45	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 05:45	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 05:45	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 05:45	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/26/18 05:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*66*		*30 - 150*	*08/24/18 18:58*	*08/26/18 05:45*	*1*
Tetrachloro-m-xylene	*67*		*30 - 150*	*08/24/18 18:58*	*08/26/18 05:45*	*1*
DCB Decachlorobiphenyl	*74*		*30 - 150*	*08/24/18 18:58*	*08/26/18 05:45*	*1*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*08/24/18 18:58*	*08/26/18 05:45*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.79**		0.12	0.078	mg/L			08/26/18 12:01	1
Sulfate	**8.47**		0.60	0.33	mg/L			08/26/18 12:01	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 21:09	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/29/18 10:35	08/29/18 21:09	2
Barium	**4.8**		4.0	1.1	ug/L		08/29/18 10:35	08/29/18 21:09	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 21:09	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 21:09	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:09	2
Chromium	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:09	2
Copper	1.9	U	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 21:09	2
Manganese	2.7	U	8.0	2.7	ug/L		08/29/18 10:35	08/29/18 21:09	2
Nickel	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:09	2
Lead	0.37	U	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 21:09	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 21:09	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 21:09	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 21:09	2
Zinc	5.4	U	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 21:09	2
Aluminum	**43.1**		40.0	15.0	ug/L		08/29/18 10:35	08/29/18 21:09	2
Sodium	**3590**		200	75.7	ug/L		08/29/18 10:35	08/29/18 21:09	2
Magnesium	**2890**		200	65.7	ug/L		08/29/18 10:35	08/29/18 21:09	2

Client Sample ID: OB-13-082218

Date Collected: 08/22/18 12:00
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-2

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**1300**		200	64.9	ug/L		08/29/18 10:35	08/29/18 21:09	2
Calcium	**7410**		200	67.6	ug/L		08/29/18 10:35	08/29/18 21:09	2
Iron	45.7	U	120	45.7	ug/L		08/29/18 10:35	08/29/18 21:09	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 21:09	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 15:24	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 15:24	2
Barium	**4.2**		4.0	1.1	ug/L		08/27/18 09:32	08/27/18 15:24	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 15:24	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 15:24	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:24	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:24	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 15:24	2
Manganese	2.7	U	8.0	2.7	ug/L		08/27/18 09:32	08/27/18 15:24	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:24	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 15:24	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 15:24	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 15:24	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 15:24	2
Zinc	26.9	U	80.0	26.9	ug/L		08/27/18 09:32	08/30/18 17:35	10
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 15:24	2
Sodium	**2950**		200	75.7	ug/L		08/27/18 09:32	08/27/18 15:24	2
Magnesium	**2580**		200	65.7	ug/L		08/27/18 09:32	08/27/18 15:24	2
Potassium	**1280**		200	64.9	ug/L		08/27/18 09:32	08/27/18 15:24	2
Calcium	**7490**		200	67.6	ug/L		08/27/18 09:32	08/27/18 15:24	2
Iron	45.7	U	120	45.7	ug/L		08/27/18 09:32	08/27/18 15:24	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 15:24	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 16:32	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 12:49	1
Bicarbonate Alkalinity as CaCO3	**25.7**		5.0	5.0	mg/L			08/25/18 14:31	1
Alkalinity	**25.7**		5.0	5.0	mg/L			08/25/18 14:31	1

Client Sample ID: OB-10-082218

Date Collected: 08/22/18 14:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 10:21	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-10-082218
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 10:21	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 10:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*08/28/18 10:21*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 12:44	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 12:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 12:44	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 12:44	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 12:44	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 12:44	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 12:44	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 12:44	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 12:44	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 12:44	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 12:44	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 12:44	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 12:44	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 12:44	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 12:44	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 12:44	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 12:44	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 12:44	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 12:44	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 12:44	1
Carbon disulfide	**0.40**	**J**	1.0	0.16	ug/L			08/27/18 12:44	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 12:44	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 12:44	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 12:44	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 12:44	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 12:44	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 12:44	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 12:44	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 12:44	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 12:44	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 12:44	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 12:44	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 12:44	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 12:44	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 12:44	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 12:44	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 12:44	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 12:44	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 12:44	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 12:44	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 12:44	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 12:44	1

Client Sample ID: OB-10-082218
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 12:44	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 12:44	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 12:44	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 12:44	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 12:44	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 12:44	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 12:44*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*08/27/18 12:44*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*08/27/18 12:44*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*08/27/18 12:44*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/18 12:44*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/25/18 10:18	08/26/18 01:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/25/18 10:18*	*08/26/18 01:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.052	0.016	ug/L		08/25/18 10:05	08/26/18 19:12	1
Benzo[a]pyrene	0.023	U	0.052	0.023	ug/L		08/25/18 10:05	08/26/18 19:12	1
Benzo[b]fluoranthene	0.025	U	0.052	0.025	ug/L		08/25/18 10:05	08/26/18 19:12	1
Bis(2-chloroethyl)ether	0.027	U	0.031	0.027	ug/L		08/25/18 10:05	08/26/18 19:12	1
Dibenz(a,h)anthracene	0.012	U	0.052	0.012	ug/L		08/25/18 10:05	08/26/18 19:12	1
Hexachlorobenzene	0.014	U	0.021	0.014	ug/L		08/25/18 10:05	08/26/18 19:12	1
Indeno[1,2,3-cd]pyrene	0.038	U	0.052	0.038	ug/L		08/25/18 10:05	08/26/18 19:12	1
N-Nitrosodimethylamine	0.12	U	0.21	0.12	ug/L		08/25/18 10:05	08/26/18 19:12	1
Pentachlorophenol	0.16	U	0.21	0.16	ug/L		08/25/18 10:05	08/26/18 19:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.30	U	10	0.30	ug/L		08/25/18 10:05	08/26/18 18:18	1
2-Chlorophenol	0.39	U	10	0.39	ug/L		08/25/18 10:05	08/26/18 18:18	1
2-Methylphenol	0.27	U *	10	0.27	ug/L		08/25/18 10:05	08/26/18 18:18	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 18:18	1
2-Nitrophenol	0.78	U	10	0.78	ug/L		08/25/18 10:05	08/26/18 18:18	1
2,4-Dimethylphenol	0.25	U	10	0.25	ug/L		08/25/18 10:05	08/26/18 18:18	1
2,4-Dichlorophenol	0.44	U	10	0.44	ug/L		08/25/18 10:05	08/26/18 18:18	1
4-Chloro-3-methylphenol	0.60	U	10	0.60	ug/L		08/25/18 10:05	08/26/18 18:18	1
2,4,6-Trichlorophenol	0.31	U	10	0.31	ug/L		08/25/18 10:05	08/26/18 18:18	1
2,4,5-Trichlorophenol	0.29	U	10	0.29	ug/L		08/25/18 10:05	08/26/18 18:18	1
2,4-Dinitrotoluene	1.0	U	2.1	1.0	ug/L		08/25/18 10:05	08/26/18 18:18	1
4-Nitrophenol	0.72	U	21	0.72	ug/L		08/25/18 10:05	08/26/18 18:18	1
4,6-Dinitro-2-methylphenol	14	U	21	14	ug/L		08/25/18 10:05	08/26/18 18:18	1
N-Nitrosodi-n-propylamine	0.45	U	1.0	0.45	ug/L		08/25/18 10:05	08/26/18 18:18	1

Client Sample ID: OB-10-082218
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.1	1.2	ug/L		08/25/18 10:05	08/26/18 18:18	1
Nitrobenzene	0.59	U	1.0	0.59	ug/L		08/25/18 10:05	08/26/18 18:18	1
Isophorone	0.83	U	10	0.83	ug/L		08/25/18 10:05	08/26/18 18:18	1
Naphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 18:18	1
4-Chloroaniline	2.0	U	10	2.0	ug/L		08/25/18 10:05	08/26/18 18:18	1
Hexachlorobutadiene	0.81	U	1.0	0.81	ug/L		08/25/18 10:05	08/26/18 18:18	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 18:18	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/25/18 10:05	08/26/18 18:18	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 18:18	1
2-Nitroaniline	0.49	U	10	0.49	ug/L		08/25/18 10:05	08/26/18 18:18	1
Dimethyl phthalate	0.80	U	10	0.80	ug/L		08/25/18 10:05	08/26/18 18:18	1
Acenaphthylene	0.86	U	10	0.86	ug/L		08/25/18 10:05	08/26/18 18:18	1
2,6-Dinitrotoluene	0.41	U	2.1	0.41	ug/L		08/25/18 10:05	08/26/18 18:18	1
3-Nitroaniline	1.0	U	10	1.0	ug/L		08/25/18 10:05	08/26/18 18:18	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 18:18	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 18:18	1
2,4-Dinitrophenol	15	U	21	15	ug/L		08/25/18 10:05	08/26/18 18:18	1
Diethyl phthalate	1.0	U	10	1.0	ug/L		08/25/18 10:05	08/26/18 18:18	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 18:18	1
Fluorene	0.95	U	10	0.95	ug/L		08/25/18 10:05	08/26/18 18:18	1
4-Nitroaniline	0.57	U	10	0.57	ug/L		08/25/18 10:05	08/26/18 18:18	1
N-Nitrosodiphenylamine	0.93	U	10	0.93	ug/L		08/25/18 10:05	08/26/18 18:18	1
4-Bromophenyl phenyl ether	0.78	U	10	0.78	ug/L		08/25/18 10:05	08/26/18 18:18	1
Phenanthrene	0.60	U	10	0.60	ug/L		08/25/18 10:05	08/26/18 18:18	1
Anthracene	0.66	U	10	0.66	ug/L		08/25/18 10:05	08/26/18 18:18	1
Carbazole	0.71	U	10	0.71	ug/L		08/25/18 10:05	08/26/18 18:18	1
Di-n-butyl phthalate	0.88	U	10	0.88	ug/L		08/25/18 10:05	08/26/18 18:18	1
Fluoranthene	0.88	U	10	0.88	ug/L		08/25/18 10:05	08/26/18 18:18	1
Pyrene	1.7	U	10	1.7	ug/L		08/25/18 10:05	08/26/18 18:18	1
Butyl benzyl phthalate	0.89	U	10	0.89	ug/L		08/25/18 10:05	08/26/18 18:18	1
Chrysene	0.94	U	2.1	0.94	ug/L		08/25/18 10:05	08/26/18 18:18	1
Bis(2-ethylhexyl) phthalate	1.8	U	2.1	1.8	ug/L		08/25/18 10:05	08/26/18 18:18	1
Di-n-octyl phthalate	5.0	U	10	5.0	ug/L		08/25/18 10:05	08/26/18 18:18	1
Benzo[k]fluoranthene	0.70	U	1.0	0.70	ug/L		08/25/18 10:05	08/26/18 18:18	1
Benzo[g,h,i]perylene	1.5	U	10	1.5	ug/L		08/25/18 10:05	08/26/18 18:18	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 18:18	1
Acetophenone	0.82	U	10	0.82	ug/L		08/25/18 10:05	08/26/18 18:18	1
Benzaldehyde	0.62	U *	10	0.62	ug/L		08/25/18 10:05	08/26/18 18:18	1
Caprolactam	0.71	U *	10	0.71	ug/L		08/25/18 10:05	08/26/18 18:18	1
Atrazine	1.4	U *	2.1	1.4	ug/L		08/25/18 10:05	08/26/18 18:18	1
2,2'-oxybis[1-chloropropane]	0.66	U	10	0.66	ug/L		08/25/18 10:05	08/26/18 18:18	1
1,2,4,5-Tetrachlorobenzene	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 18:18	1
2,3,4,6-Tetrachlorophenol	0.78	U	10	0.78	ug/L		08/25/18 10:05	08/26/18 18:18	1
3,3'-Dichlorobenzidine	1.5	U	10	1.5	ug/L		08/25/18 10:05	08/26/18 18:18	1
Bis(2-chloroethoxy)methane	0.25	U	10	0.25	ug/L		08/25/18 10:05	08/26/18 18:18	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:05*	*08/26/18 18:18*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-10-082218
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*107*		*30 - 130*	*08/25/18 10:05*	*08/26/18 18:18*	*1*
Phenol-d5 (Surr)	*28*		*15 - 110*	*08/25/18 10:05*	*08/26/18 18:18*	*1*
Terphenyl-d14 (Surr)	*99*		*30 - 130*	*08/25/18 10:05*	*08/26/18 18:18*	*1*
2,4,6-Tribromophenol (Surr)	*108*		*15 - 110*	*08/25/18 10:05*	*08/26/18 18:18*	*1*
2-Fluorophenol (Surr)	*46*		*15 - 110*	*08/25/18 10:05*	*08/26/18 18:18*	*1*
2-Fluorobiphenyl	*91*		*30 - 130*	*08/25/18 10:05*	*08/26/18 18:18*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 19:03	08/26/18 06:08	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 19:03	08/26/18 06:08	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 19:03	08/26/18 06:08	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 19:03	08/26/18 06:08	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 19:03	08/26/18 06:08	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 19:03	08/26/18 06:08	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 19:03	08/26/18 06:08	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 19:03	08/26/18 06:08	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 19:03	08/26/18 06:08	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 19:03	08/26/18 06:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*67*		*30 - 150*	*08/24/18 19:03*	*08/26/18 06:08*	*1*
Tetrachloro-m-xylene	*68*		*30 - 150*	*08/24/18 19:03*	*08/26/18 06:08*	*1*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*08/24/18 19:03*	*08/26/18 06:08*	*1*
DCB Decachlorobiphenyl	*81*		*30 - 150*	*08/24/18 19:03*	*08/26/18 06:08*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.33**		0.12	0.078	mg/L			08/26/18 12:14	1
Sulfate	**5.57**		0.60	0.33	mg/L			08/26/18 12:14	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 21:14	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/29/18 10:35	08/29/18 21:14	2
Barium	**6.7**		4.0	1.1	ug/L		08/29/18 10:35	08/29/18 21:14	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 21:14	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 21:14	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:14	2
Chromium	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:14	2
Copper	1.9	U	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 21:14	2
Manganese	**30.0**		8.0	2.7	ug/L		08/29/18 10:35	08/29/18 21:14	2
Nickel	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:14	2
Lead	0.37	U	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 21:14	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 21:14	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 21:14	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 21:14	2
Zinc	5.4	U	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 21:14	2
Aluminum	**19.2**	**J**	40.0	15.0	ug/L		08/29/18 10:35	08/29/18 21:14	2
Sodium	**3970**		200	75.7	ug/L		08/29/18 10:35	08/29/18 21:14	2
Magnesium	**4340**		200	65.7	ug/L		08/29/18 10:35	08/29/18 21:14	2

Client Sample ID: OB-10-082218

Lab Sample ID: 460-163188-3

Date Collected: 08/22/18 14:30

Matrix: Water

Date Received: 08/23/18 11:25

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**1260**		200	64.9	ug/L		08/29/18 10:35	08/29/18 21:14	2
Calcium	**13500**		200	67.6	ug/L		08/29/18 10:35	08/29/18 21:14	2
Iron	**214**		120	45.7	ug/L		08/29/18 10:35	08/29/18 21:14	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 21:14	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 15:30	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 15:30	2
Barium	**6.3**		4.0	1.1	ug/L		08/27/18 09:32	08/27/18 15:30	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 15:30	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 15:30	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:30	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:30	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 15:30	2
Manganese	2.7	U	8.0	2.7	ug/L		08/27/18 09:32	08/27/18 15:30	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:30	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 15:30	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 15:30	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 15:30	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 15:30	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 15:30	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 15:30	2
Sodium	**3210**		200	75.7	ug/L		08/27/18 09:32	08/27/18 15:30	2
Magnesium	**3810**		200	65.7	ug/L		08/27/18 09:32	08/27/18 15:30	2
Potassium	**1260**		200	64.9	ug/L		08/27/18 09:32	08/27/18 15:30	2
Calcium	**13600**		200	67.6	ug/L		08/27/18 09:32	08/27/18 15:30	2
Iron	45.7	U	120	45.7	ug/L		08/27/18 09:32	08/27/18 15:30	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 15:30	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 16:34	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 16:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 12:50	1
Bicarbonate Alkalinity as CaCO3	**47.1**		5.0	5.0	mg/L			08/25/18 14:43	1
Alkalinity	**47.1**		5.0	5.0	mg/L			08/25/18 14:43	1

Client Sample ID: OB-29-082218

Lab Sample ID: 460-163188-4

Date Collected: 08/22/18 16:05

Matrix: Water

Date Received: 08/23/18 11:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 03:11	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-29-082218
Date Collected: 08/22/18 16:05
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 03:11	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*08/28/18 03:11*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 13:07	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 13:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 13:07	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 13:07	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 13:07	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 13:07	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 13:07	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 13:07	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 13:07	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 13:07	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 13:07	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 13:07	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 13:07	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 13:07	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 13:07	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 13:07	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 13:07	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 13:07	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 13:07	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 13:07	1
Carbon disulfide	**0.28**	**J**	1.0	0.16	ug/L			08/27/18 13:07	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 13:07	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 13:07	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 13:07	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 13:07	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 13:07	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 13:07	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 13:07	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 13:07	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 13:07	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 13:07	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 13:07	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 13:07	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 13:07	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 13:07	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 13:07	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 13:07	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 13:07	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 13:07	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 13:07	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 13:07	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 13:07	1

Client Sample ID: OB-29-082218
Date Collected: 08/22/18 16:05
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 13:07	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 13:07	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 13:07	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 13:07	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 13:07	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 13:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 13:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*08/27/18 13:07*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*08/27/18 13:07*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*08/27/18 13:07*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/27/18 13:07*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/25/18 10:18	08/26/18 01:45	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/25/18 10:18*	*08/26/18 01:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**0.036**	**J**	0.052	0.016	ug/L		08/25/18 10:05	08/26/18 19:33	1
Benzo[a]pyrene	**0.046**	**J**	0.052	0.023	ug/L		08/25/18 10:05	08/26/18 19:33	1
Benzo[b]fluoranthene	**0.071**		0.052	0.025	ug/L		08/25/18 10:05	08/26/18 19:33	1
Bis(2-chloroethyl)ether	0.027	U	0.031	0.027	ug/L		08/25/18 10:05	08/26/18 19:33	1
Dibenz(a,h)anthracene	0.012	U	0.052	0.012	ug/L		08/25/18 10:05	08/26/18 19:33	1
Hexachlorobenzene	0.014	U	0.021	0.014	ug/L		08/25/18 10:05	08/26/18 19:33	1
Indeno[1,2,3-cd]pyrene	**0.076**		0.052	0.038	ug/L		08/25/18 10:05	08/26/18 19:33	1
N-Nitrosodimethylamine	0.12	U	0.21	0.12	ug/L		08/25/18 10:05	08/26/18 19:33	1
Pentachlorophenol	0.16	U	0.21	0.16	ug/L		08/25/18 10:05	08/26/18 19:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.30	U	10	0.30	ug/L		08/25/18 10:05	08/26/18 18:39	1
2-Chlorophenol	0.39	U	10	0.39	ug/L		08/25/18 10:05	08/26/18 18:39	1
2-Methylphenol	0.27	U *	10	0.27	ug/L		08/25/18 10:05	08/26/18 18:39	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 18:39	1
2-Nitrophenol	0.78	U	10	0.78	ug/L		08/25/18 10:05	08/26/18 18:39	1
2,4-Dimethylphenol	0.25	U	10	0.25	ug/L		08/25/18 10:05	08/26/18 18:39	1
2,4-Dichlorophenol	0.44	U	10	0.44	ug/L		08/25/18 10:05	08/26/18 18:39	1
4-Chloro-3-methylphenol	0.60	U	10	0.60	ug/L		08/25/18 10:05	08/26/18 18:39	1
2,4,6-Trichlorophenol	0.31	U	10	0.31	ug/L		08/25/18 10:05	08/26/18 18:39	1
2,4,5-Trichlorophenol	0.29	U	10	0.29	ug/L		08/25/18 10:05	08/26/18 18:39	1
2,4-Dinitrotoluene	1.0	U	2.1	1.0	ug/L		08/25/18 10:05	08/26/18 18:39	1
4-Nitrophenol	0.72	U	21	0.72	ug/L		08/25/18 10:05	08/26/18 18:39	1
4,6-Dinitro-2-methylphenol	14	U	21	14	ug/L		08/25/18 10:05	08/26/18 18:39	1
N-Nitrosodi-n-propylamine	0.45	U	1.0	0.45	ug/L		08/25/18 10:05	08/26/18 18:39	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-29-082218
Date Collected: 08/22/18 16:05
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.1	1.2	ug/L		08/25/18 10:05	08/26/18 18:39	1
Nitrobenzene	0.59	U	1.0	0.59	ug/L		08/25/18 10:05	08/26/18 18:39	1
Isophorone	0.83	U	10	0.83	ug/L		08/25/18 10:05	08/26/18 18:39	1
Naphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 18:39	1
4-Chloroaniline	2.0	U	10	2.0	ug/L		08/25/18 10:05	08/26/18 18:39	1
Hexachlorobutadiene	0.81	U	1.0	0.81	ug/L		08/25/18 10:05	08/26/18 18:39	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 18:39	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/25/18 10:05	08/26/18 18:39	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 18:39	1
2-Nitroaniline	0.49	U	10	0.49	ug/L		08/25/18 10:05	08/26/18 18:39	1
Dimethyl phthalate	0.80	U	10	0.80	ug/L		08/25/18 10:05	08/26/18 18:39	1
Acenaphthylene	0.86	U	10	0.86	ug/L		08/25/18 10:05	08/26/18 18:39	1
2,6-Dinitrotoluene	0.41	U	2.1	0.41	ug/L		08/25/18 10:05	08/26/18 18:39	1
3-Nitroaniline	1.0	U	10	1.0	ug/L		08/25/18 10:05	08/26/18 18:39	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 18:39	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 18:39	1
2,4-Dinitrophenol	15	U	21	15	ug/L		08/25/18 10:05	08/26/18 18:39	1
Diethyl phthalate	1.0	U	10	1.0	ug/L		08/25/18 10:05	08/26/18 18:39	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 18:39	1
Fluorene	0.95	U	10	0.95	ug/L		08/25/18 10:05	08/26/18 18:39	1
4-Nitroaniline	0.57	U	10	0.57	ug/L		08/25/18 10:05	08/26/18 18:39	1
N-Nitrosodiphenylamine	0.93	U	10	0.93	ug/L		08/25/18 10:05	08/26/18 18:39	1
4-Bromophenyl phenyl ether	0.78	U	10	0.78	ug/L		08/25/18 10:05	08/26/18 18:39	1
Phenanthrene	0.60	U	10	0.60	ug/L		08/25/18 10:05	08/26/18 18:39	1
Anthracene	0.66	U	10	0.66	ug/L		08/25/18 10:05	08/26/18 18:39	1
Carbazole	0.71	U	10	0.71	ug/L		08/25/18 10:05	08/26/18 18:39	1
Di-n-butyl phthalate	0.88	U	10	0.88	ug/L		08/25/18 10:05	08/26/18 18:39	1
Fluoranthene	0.88	U	10	0.88	ug/L		08/25/18 10:05	08/26/18 18:39	1
Pyrene	1.7	U	10	1.7	ug/L		08/25/18 10:05	08/26/18 18:39	1
Butyl benzyl phthalate	0.89	U	10	0.89	ug/L		08/25/18 10:05	08/26/18 18:39	1
Chrysene	0.94	U	2.1	0.94	ug/L		08/25/18 10:05	08/26/18 18:39	1
Bis(2-ethylhexyl) phthalate	1.8	U	2.1	1.8	ug/L		08/25/18 10:05	08/26/18 18:39	1
Di-n-octyl phthalate	5.0	U	10	5.0	ug/L		08/25/18 10:05	08/26/18 18:39	1
Benzo[k]fluoranthene	0.70	U	1.0	0.70	ug/L		08/25/18 10:05	08/26/18 18:39	1
Benzo[g,h,i]perylene	1.5	U	10	1.5	ug/L		08/25/18 10:05	08/26/18 18:39	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 18:39	1
Acetophenone	0.82	U	10	0.82	ug/L		08/25/18 10:05	08/26/18 18:39	1
Benzaldehyde	0.62	U *	10	0.62	ug/L		08/25/18 10:05	08/26/18 18:39	1
Caprolactam	0.71	U *	10	0.71	ug/L		08/25/18 10:05	08/26/18 18:39	1
Atrazine	1.4	U *	2.1	1.4	ug/L		08/25/18 10:05	08/26/18 18:39	1
2,2'-oxybis[1-chloropropane]	0.66	U	10	0.66	ug/L		08/25/18 10:05	08/26/18 18:39	1
1,2,4,5-Tetrachlorobenzene	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 18:39	1
2,3,4,6-Tetrachlorophenol	0.78	U	10	0.78	ug/L		08/25/18 10:05	08/26/18 18:39	1
3,3'-Dichlorobenzidine	1.5	U	10	1.5	ug/L		08/25/18 10:05	08/26/18 18:39	1
Bis(2-chloroethoxy)methane	0.25	U	10	0.25	ug/L		08/25/18 10:05	08/26/18 18:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*11*	*J*	*ug/L*		*3.36*		*08/25/18 10:05*	*08/26/18 18:39*	*1*

Client Sample ID: OB-29-082218

Date Collected: 08/22/18 16:05
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-4

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*106*		*30 - 130*	*08/25/18 10:05*	*08/26/18 18:39*	*1*
Phenol-d5 (Surr)	*21*		*15 - 110*	*08/25/18 10:05*	*08/26/18 18:39*	*1*
Terphenyl-d14 (Surr)	*101*		*30 - 130*	*08/25/18 10:05*	*08/26/18 18:39*	*1*
2,4,6-Tribromophenol (Surr)	*99*		*15 - 110*	*08/25/18 10:05*	*08/26/18 18:39*	*1*
2-Fluorophenol (Surr)	*35*		*15 - 110*	*08/25/18 10:05*	*08/26/18 18:39*	*1*
2-Fluorobiphenyl	*89*		*30 - 130*	*08/25/18 10:05*	*08/26/18 18:39*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 19:03	08/26/18 06:32	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 19:03	08/26/18 06:32	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 19:03	08/26/18 06:32	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 19:03	08/26/18 06:32	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 19:03	08/26/18 06:32	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 19:03	08/26/18 06:32	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 19:03	08/26/18 06:32	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 19:03	08/26/18 06:32	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 19:03	08/26/18 06:32	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 19:03	08/26/18 06:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*65*		*30 - 150*	*08/24/18 19:03*	*08/26/18 06:32*	*1*
Tetrachloro-m-xylene	*64*		*30 - 150*	*08/24/18 19:03*	*08/26/18 06:32*	*1*
DCB Decachlorobiphenyl	*75*		*30 - 150*	*08/24/18 19:03*	*08/26/18 06:32*	*1*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*08/24/18 19:03*	*08/26/18 06:32*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.26**		0.12	0.078	mg/L			08/26/18 12:27	1
Sulfate	**5.55**		0.60	0.33	mg/L			08/26/18 12:27	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 21:17	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/29/18 10:35	08/29/18 21:17	2
Barium	**10.4**		4.0	1.1	ug/L		08/29/18 10:35	08/29/18 21:17	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 21:17	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 21:17	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:17	2
Chromium	**1.4**	**J**	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:17	2
Copper	**2.3**	**J**	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 21:17	2
Manganese	**23.0**		8.0	2.7	ug/L		08/29/18 10:35	08/29/18 21:17	2
Nickel	**1.6**	**J**	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:17	2
Lead	**0.42**	**J**	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 21:17	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 21:17	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 21:17	2
Vanadium	**1.4**	**J**	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 21:17	2
Zinc	5.4	U	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 21:17	2
Aluminum	**624**		40.0	15.0	ug/L		08/29/18 10:35	08/29/18 21:17	2
Sodium	**3960**		200	75.7	ug/L		08/29/18 10:35	08/29/18 21:17	2
Magnesium	**4490**		200	65.7	ug/L		08/29/18 10:35	08/29/18 21:17	2

Client Sample ID: OB-29-082218

Lab Sample ID: 460-163188-4

Date Collected: 08/22/18 16:05

Matrix: Water

Date Received: 08/23/18 11:25

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**1390**		200	64.9	ug/L		08/29/18 10:35	08/29/18 21:17	2
Calcium	**13300**		200	67.6	ug/L		08/29/18 10:35	08/29/18 21:17	2
Iron	**949**		120	45.7	ug/L		08/29/18 10:35	08/29/18 21:17	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 21:17	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 15:34	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 15:34	2
Barium	**6.2**		4.0	1.1	ug/L		08/27/18 09:32	08/27/18 15:34	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 15:34	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 15:34	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:34	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:34	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 15:34	2
Manganese	2.7	U	8.0	2.7	ug/L		08/27/18 09:32	08/27/18 15:34	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:34	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 15:34	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 15:34	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 15:34	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 15:34	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 15:34	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 15:34	2
Sodium	**3180**		200	75.7	ug/L		08/27/18 09:32	08/27/18 15:34	2
Magnesium	**3780**		200	65.7	ug/L		08/27/18 09:32	08/27/18 15:34	2
Potassium	**1270**		200	64.9	ug/L		08/27/18 09:32	08/27/18 15:34	2
Calcium	**13700**		200	67.6	ug/L		08/27/18 09:32	08/27/18 15:34	2
Iron	45.7	U	120	45.7	ug/L		08/27/18 09:32	08/27/18 15:34	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 15:34	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 16:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.0027**	**J**	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 12:51	1
Bicarbonate Alkalinity as CaCO3	**46.9**		5.0	5.0	mg/L			08/25/18 14:50	1
Alkalinity	**46.9**		5.0	5.0	mg/L			08/25/18 14:50	1

Client Sample ID: OB-15B-082218

Lab Sample ID: 460-163188-5

Date Collected: 08/22/18 12:15

Matrix: Water

Date Received: 08/23/18 11:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 03:34	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-15B-082218
Date Collected: 08/22/18 12:15
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 03:34	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*08/28/18 03:34*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 13:31	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 13:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 13:31	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 13:31	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 13:31	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 13:31	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 13:31	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 13:31	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 13:31	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 13:31	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 13:31	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 13:31	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 13:31	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 13:31	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 13:31	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 13:31	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 13:31	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 13:31	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 13:31	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 13:31	1
Carbon disulfide	**0.26**	**J**	1.0	0.16	ug/L			08/27/18 13:31	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 13:31	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 13:31	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 13:31	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 13:31	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 13:31	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 13:31	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 13:31	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 13:31	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 13:31	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 13:31	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 13:31	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 13:31	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 13:31	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 13:31	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 13:31	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 13:31	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 13:31	1
Methylene Chloride	**0.34**	**J**	1.0	0.32	ug/L			08/27/18 13:31	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 13:31	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 13:31	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 13:31	1

Client Sample ID: OB-15B-082218
Date Collected: 08/22/18 12:15
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 13:31	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 13:31	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 13:31	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 13:31	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 13:31	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 13:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 13:31*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*08/27/18 13:31*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*08/27/18 13:31*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*08/27/18 13:31*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/27/18 13:31*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/25/18 10:18	08/26/18 02:03	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*08/25/18 10:18*	*08/26/18 02:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:05	08/26/18 19:55	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:05	08/26/18 19:55	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:05	08/26/18 19:55	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:05	08/26/18 19:55	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:05	08/26/18 19:55	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 10:05	08/26/18 19:55	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:05	08/26/18 19:55	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:05	08/26/18 19:55	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:05	08/26/18 19:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:05	08/26/18 19:00	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:05	08/26/18 19:00	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:05	08/26/18 19:00	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 19:00	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 19:00	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 19:00	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:05	08/26/18 19:00	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 19:00	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:05	08/26/18 19:00	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:05	08/26/18 19:00	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:05	08/26/18 19:00	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:05	08/26/18 19:00	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:05	08/26/18 19:00	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:05	08/26/18 19:00	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-15B-082218
Date Collected: 08/22/18 12:15
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:05	08/26/18 19:00	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:05	08/26/18 19:00	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:05	08/26/18 19:00	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 19:00	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:05	08/26/18 19:00	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:05	08/26/18 19:00	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 19:00	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:05	08/26/18 19:00	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 19:00	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:05	08/26/18 19:00	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:05	08/26/18 19:00	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:05	08/26/18 19:00	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:05	08/26/18 19:00	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:05	08/26/18 19:00	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 19:00	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 19:00	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:05	08/26/18 19:00	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:05	08/26/18 19:00	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 19:00	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:05	08/26/18 19:00	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:05	08/26/18 19:00	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:05	08/26/18 19:00	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 19:00	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 19:00	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 19:00	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:05	08/26/18 19:00	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 19:00	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 19:00	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:05	08/26/18 19:00	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:05	08/26/18 19:00	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:05	08/26/18 19:00	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:05	08/26/18 19:00	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:05	08/26/18 19:00	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:05	08/26/18 19:00	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 19:00	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 19:00	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:05	08/26/18 19:00	1
Benzaldehyde	0.59	U *	10	0.59	ug/L		08/25/18 10:05	08/26/18 19:00	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:05	08/26/18 19:00	1
Atrazine	1.3	U *	2.0	1.3	ug/L		08/25/18 10:05	08/26/18 19:00	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 19:00	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 19:00	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 19:00	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 19:00	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 19:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:05*	*08/26/18 19:00*	*1*

Client Sample ID: OB-15B-082218

Date Collected: 08/22/18 12:15
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	98		30 - 130	08/25/18 10:05	08/26/18 19:00	1
Phenol-d5 (Surr)	27		15 - 110	08/25/18 10:05	08/26/18 19:00	1
Terphenyl-d14 (Surr)	91		30 - 130	08/25/18 10:05	08/26/18 19:00	1
2,4,6-Tribromophenol (Surr)	102		15 - 110	08/25/18 10:05	08/26/18 19:00	1
2-Fluorophenol (Surr)	42		15 - 110	08/25/18 10:05	08/26/18 19:00	1
2-Fluorobiphenyl	81		30 - 130	08/25/18 10:05	08/26/18 19:00	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:22	1
PCB-1016	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:22	1
PCB-1221	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:22	1
PCB-1232	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:22	1
PCB-1242	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:22	1
PCB-1248	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:22	1
PCB-1254	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 20:22	1
PCB-1260	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 20:22	1
PCB-1262	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 20:22	1
PCB-1268	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 20:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	72		30 - 150	08/24/18 19:08	08/25/18 20:22	1
Tetrachloro-m-xylene	72		30 - 150	08/24/18 19:08	08/25/18 20:22	1
DCB Decachlorobiphenyl	82		30 - 150	08/24/18 19:08	08/25/18 20:22	1
DCB Decachlorobiphenyl	78		30 - 150	08/24/18 19:08	08/25/18 20:22	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.79**		0.12	0.078	mg/L			08/26/18 12:40	1
Sulfate	**12.2**		0.60	0.33	mg/L			08/26/18 12:40	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 21:28	2
Arsenic	**0.98**	**J**	2.0	0.77	ug/L		08/29/18 10:35	08/29/18 21:28	2
Barium	**26.5**		4.0	1.1	ug/L		08/29/18 10:35	08/29/18 21:28	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 21:28	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 21:28	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:28	2
Chromium	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:28	2
Copper	1.9	U	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 21:28	2
Manganese	**2380**		8.0	2.7	ug/L		08/29/18 10:35	08/29/18 21:28	2
Nickel	**6.1**		4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:28	2
Lead	0.37	U	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 21:28	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 21:28	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 21:28	2
Vanadium	**2.0**	**J**	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 21:28	2
Zinc	5.4	U	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 21:28	2
Aluminum	**67.5**		40.0	15.0	ug/L		08/29/18 10:35	08/29/18 21:28	2
Sodium	**4320**		200	75.7	ug/L		08/29/18 10:35	08/29/18 21:28	2
Magnesium	**6190**		200	65.7	ug/L		08/29/18 10:35	08/29/18 21:28	2

Client Sample ID: OB-15B-082218

Lab Sample ID: 460-163188-5

Date Collected: 08/22/18 12:15

Matrix: Water

Date Received: 08/23/18 11:25

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**704**		200	64.9	ug/L		08/29/18 10:35	08/29/18 21:28	2
Calcium	**21400**		200	67.6	ug/L		08/29/18 10:35	08/29/18 21:28	2
Iron	**423**		120	45.7	ug/L		08/29/18 10:35	08/29/18 21:28	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 21:28	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 15:58	2
Arsenic	**0.82**	**J**	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 15:58	2
Barium	1.1	U	4.0	1.1	ug/L		08/27/18 09:32	08/27/18 15:58	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 15:58	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 15:58	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:58	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:58	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 15:58	2
Manganese	**147**		8.0	2.7	ug/L		08/27/18 09:32	08/27/18 15:58	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:58	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 15:58	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 15:58	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 15:58	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 15:58	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 15:58	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 15:58	2
Sodium	**3540**		200	75.7	ug/L		08/27/18 09:32	08/27/18 15:58	2
Magnesium	**5440**		200	65.7	ug/L		08/27/18 09:32	08/27/18 15:58	2
Potassium	**695**		200	64.9	ug/L		08/27/18 09:32	08/27/18 15:58	2
Calcium	**21900**		200	67.6	ug/L		08/27/18 09:32	08/27/18 15:58	2
Iron	45.7	U	120	45.7	ug/L		08/27/18 09:32	08/27/18 15:58	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 15:58	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 16:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 12:52	1
Bicarbonate Alkalinity as CaCO3	**71.0**		5.0	5.0	mg/L			08/25/18 14:57	1
Alkalinity	**71.0**		5.0	5.0	mg/L			08/25/18 14:57	1

Client Sample ID: OB-33-082218

Lab Sample ID: 460-163188-6

Date Collected: 08/22/18 14:25

Matrix: Water

Date Received: 08/23/18 11:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 03:57	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-33-082218
Date Collected: 08/22/18 14:25
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 03:57	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 03:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*70 - 130*		*08/28/18 03:57*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 13:54	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 13:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 13:54	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 13:54	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 13:54	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 13:54	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 13:54	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 13:54	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 13:54	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 13:54	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 13:54	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 13:54	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 13:54	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 13:54	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 13:54	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 13:54	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 13:54	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 13:54	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 13:54	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 13:54	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/27/18 13:54	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 13:54	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 13:54	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 13:54	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 13:54	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 13:54	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 13:54	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 13:54	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 13:54	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 13:54	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 13:54	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 13:54	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 13:54	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 13:54	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 13:54	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 13:54	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 13:54	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 13:54	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 13:54	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 13:54	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 13:54	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 13:54	1

Client Sample ID: OB-33-082218
Date Collected: 08/22/18 14:25
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 13:54	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 13:54	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 13:54	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 13:54	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 13:54	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 13:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 13:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*08/27/18 13:54*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*08/27/18 13:54*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/27/18 13:54*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/18 13:54*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/25/18 10:18	08/26/18 02:20	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*33*		*10 - 150*	*08/25/18 10:18*	*08/26/18 02:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:05	08/26/18 20:16	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:05	08/26/18 20:16	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:05	08/26/18 20:16	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:05	08/26/18 20:16	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:05	08/26/18 20:16	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 10:05	08/26/18 20:16	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:05	08/26/18 20:16	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:05	08/26/18 20:16	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:05	08/26/18 20:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:05	08/26/18 19:22	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:05	08/26/18 19:22	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:05	08/26/18 19:22	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 19:22	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 19:22	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 19:22	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:05	08/26/18 19:22	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 19:22	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:05	08/26/18 19:22	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:05	08/26/18 19:22	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:05	08/26/18 19:22	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:05	08/26/18 19:22	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:05	08/26/18 19:22	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:05	08/26/18 19:22	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-33-082218
Date Collected: 08/22/18 14:25
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:05	08/26/18 19:22	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:05	08/26/18 19:22	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:05	08/26/18 19:22	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 19:22	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:05	08/26/18 19:22	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:05	08/26/18 19:22	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 19:22	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:05	08/26/18 19:22	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 19:22	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:05	08/26/18 19:22	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:05	08/26/18 19:22	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:05	08/26/18 19:22	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:05	08/26/18 19:22	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:05	08/26/18 19:22	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 19:22	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 19:22	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:05	08/26/18 19:22	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:05	08/26/18 19:22	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 19:22	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:05	08/26/18 19:22	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:05	08/26/18 19:22	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:05	08/26/18 19:22	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 19:22	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 19:22	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 19:22	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:05	08/26/18 19:22	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 19:22	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 19:22	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:05	08/26/18 19:22	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:05	08/26/18 19:22	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:05	08/26/18 19:22	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:05	08/26/18 19:22	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:05	08/26/18 19:22	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:05	08/26/18 19:22	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 19:22	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 19:22	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:05	08/26/18 19:22	1
Benzaldehyde	0.59	U *	10	0.59	ug/L		08/25/18 10:05	08/26/18 19:22	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:05	08/26/18 19:22	1
Atrazine	1.3	U *	2.0	1.3	ug/L		08/25/18 10:05	08/26/18 19:22	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 19:22	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 19:22	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 19:22	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 19:22	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 19:22	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:05*	*08/26/18 19:22*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-33-082218
Date Collected: 08/22/18 14:25
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	98		30 - 130	08/25/18 10:05	08/26/18 19:22	1
Phenol-d5 (Surr)	28		15 - 110	08/25/18 10:05	08/26/18 19:22	1
Terphenyl-d14 (Surr)	93		30 - 130	08/25/18 10:05	08/26/18 19:22	1
2,4,6-Tribromophenol (Surr)	99		15 - 110	08/25/18 10:05	08/26/18 19:22	1
2-Fluorophenol (Surr)	43		15 - 110	08/25/18 10:05	08/26/18 19:22	1
2-Fluorobiphenyl	81		30 - 130	08/25/18 10:05	08/26/18 19:22	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:38	1
PCB-1016	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:38	1
PCB-1221	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:38	1
PCB-1232	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:38	1
PCB-1242	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:38	1
PCB-1248	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:38	1
PCB-1254	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 20:38	1
PCB-1260	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 20:38	1
PCB-1262	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 20:38	1
PCB-1268	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		30 - 150	08/24/18 19:08	08/25/18 20:38	1
Tetrachloro-m-xylene	74		30 - 150	08/24/18 19:08	08/25/18 20:38	1
DCB Decachlorobiphenyl	85		30 - 150	08/24/18 19:08	08/25/18 20:38	1
DCB Decachlorobiphenyl	81		30 - 150	08/24/18 19:08	08/25/18 20:38	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.73**		0.12	0.078	mg/L			08/26/18 12:53	1
Sulfate	**12.6**		0.60	0.33	mg/L			08/26/18 12:53	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 21:30	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/29/18 10:35	08/29/18 21:30	2
Barium	**22.8**		4.0	1.1	ug/L		08/29/18 10:35	08/29/18 21:30	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 21:30	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 21:30	2
Cobalt	**4.9**		4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:30	2
Chromium	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:30	2
Copper	1.9	U	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 21:30	2
Manganese	**24.3**		8.0	2.7	ug/L		08/29/18 10:35	08/29/18 21:30	2
Nickel	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:30	2
Lead	0.37	U	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 21:30	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 21:30	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 21:30	2
Vanadium	**2.0**	**J**	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 21:30	2
Zinc	5.4	U	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 21:30	2
Aluminum	**412**		40.0	15.0	ug/L		08/29/18 10:35	08/29/18 21:30	2
Sodium	**5890**		200	75.7	ug/L		08/29/18 10:35	08/29/18 21:30	2
Magnesium	**5930**		200	65.7	ug/L		08/29/18 10:35	08/29/18 21:30	2

Client Sample ID: OB-33-082218

Lab Sample ID: 460-163188-6

Date Collected: 08/22/18 14:25

Matrix: Water

Date Received: 08/23/18 11:25

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**1060**		200	64.9	ug/L		08/29/18 10:35	08/29/18 21:30	2
Calcium	**12300**		200	67.6	ug/L		08/29/18 10:35	08/29/18 21:30	2
Iron	**519**		120	45.7	ug/L		08/29/18 10:35	08/29/18 21:30	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 21:30	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 16:01	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 16:01	2
Barium	**18.8**		4.0	1.1	ug/L		08/27/18 09:32	08/27/18 16:01	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 16:01	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 16:01	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:01	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:01	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 16:01	2
Manganese	2.7	U	8.0	2.7	ug/L		08/27/18 09:32	08/27/18 16:01	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:01	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 16:01	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 16:01	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 16:01	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 16:01	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 16:01	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 16:01	2
Sodium	**4800**		200	75.7	ug/L		08/27/18 09:32	08/27/18 16:01	2
Magnesium	**5090**		200	65.7	ug/L		08/27/18 09:32	08/27/18 16:01	2
Potassium	**944**		200	64.9	ug/L		08/27/18 09:32	08/27/18 16:01	2
Calcium	**12600**		200	67.6	ug/L		08/27/18 09:32	08/27/18 16:01	2
Iron	45.7	U	120	45.7	ug/L		08/27/18 09:32	08/27/18 16:01	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 16:01	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 17:40	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 12:53	1
Bicarbonate Alkalinity as CaCO3	**49.9**		5.0	5.0	mg/L			08/25/18 15:05	1
Alkalinity	**49.9**		5.0	5.0	mg/L			08/25/18 15:05	1

Client Sample ID: OB-32-082218

Lab Sample ID: 460-163188-7

Date Collected: 08/22/18 16:15

Matrix: Water

Date Received: 08/23/18 11:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 04:21	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-32-082218
Date Collected: 08/22/18 16:15
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 04:21	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 04:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*08/28/18 04:21*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 14:18	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 14:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 14:18	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 14:18	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 14:18	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 14:18	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 14:18	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 14:18	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 14:18	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 14:18	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 14:18	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 14:18	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 14:18	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 14:18	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 14:18	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 14:18	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 14:18	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 14:18	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 14:18	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 14:18	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/27/18 14:18	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 14:18	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 14:18	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 14:18	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 14:18	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 14:18	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 14:18	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 14:18	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 14:18	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 14:18	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 14:18	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 14:18	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 14:18	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 14:18	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 14:18	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 14:18	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 14:18	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 14:18	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 14:18	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 14:18	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 14:18	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 14:18	1

Client Sample ID: OB-32-082218
Date Collected: 08/22/18 16:15
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 14:18	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 14:18	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 14:18	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 14:18	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 14:18	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 14:18	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 14:18*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/27/18 14:18*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*08/27/18 14:18*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*08/27/18 14:18*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/27/18 14:18*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/25/18 10:18	08/26/18 02:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/25/18 10:18*	*08/26/18 02:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:05	08/26/18 20:37	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:05	08/26/18 20:37	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:05	08/26/18 20:37	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:05	08/26/18 20:37	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:05	08/26/18 20:37	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 10:05	08/26/18 20:37	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:05	08/26/18 20:37	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:05	08/26/18 20:37	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:05	08/26/18 20:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:05	08/26/18 19:43	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:05	08/26/18 19:43	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:05	08/26/18 19:43	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 19:43	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 19:43	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 19:43	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:05	08/26/18 19:43	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 19:43	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:05	08/26/18 19:43	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:05	08/26/18 19:43	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:05	08/26/18 19:43	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:05	08/26/18 19:43	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:05	08/26/18 19:43	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:05	08/26/18 19:43	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-32-082218
Date Collected: 08/22/18 16:15
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:05	08/26/18 19:43	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:05	08/26/18 19:43	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:05	08/26/18 19:43	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 19:43	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:05	08/26/18 19:43	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:05	08/26/18 19:43	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 19:43	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:05	08/26/18 19:43	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 19:43	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:05	08/26/18 19:43	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:05	08/26/18 19:43	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:05	08/26/18 19:43	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:05	08/26/18 19:43	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:05	08/26/18 19:43	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 19:43	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 19:43	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:05	08/26/18 19:43	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:05	08/26/18 19:43	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 19:43	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:05	08/26/18 19:43	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:05	08/26/18 19:43	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:05	08/26/18 19:43	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 19:43	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 19:43	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 19:43	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:05	08/26/18 19:43	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 19:43	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 19:43	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:05	08/26/18 19:43	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:05	08/26/18 19:43	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:05	08/26/18 19:43	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:05	08/26/18 19:43	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:05	08/26/18 19:43	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:05	08/26/18 19:43	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 19:43	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 19:43	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:05	08/26/18 19:43	1
Benzaldehyde	0.59	U *	10	0.59	ug/L		08/25/18 10:05	08/26/18 19:43	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:05	08/26/18 19:43	1
Atrazine	1.3	U *	2.0	1.3	ug/L		08/25/18 10:05	08/26/18 19:43	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 19:43	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 19:43	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 19:43	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 19:43	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 19:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:05*	*08/26/18 19:43*	*1*

Client Sample ID: OB-32-082218

Date Collected: 08/22/18 16:15
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-7

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*91*		*30 - 130*	*08/25/18 10:05*	*08/26/18 19:43*	*1*
Phenol-d5 (Surr)	*26*		*15 - 110*	*08/25/18 10:05*	*08/26/18 19:43*	*1*
Terphenyl-d14 (Surr)	*93*		*30 - 130*	*08/25/18 10:05*	*08/26/18 19:43*	*1*
2,4,6-Tribromophenol (Surr)	*94*		*15 - 110*	*08/25/18 10:05*	*08/26/18 19:43*	*1*
2-Fluorophenol (Surr)	*40*		*15 - 110*	*08/25/18 10:05*	*08/26/18 19:43*	*1*
2-Fluorobiphenyl	*73*		*30 - 130*	*08/25/18 10:05*	*08/26/18 19:43*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:54	1
PCB-1016	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:54	1
PCB-1221	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:54	1
PCB-1232	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:54	1
PCB-1242	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:54	1
PCB-1248	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 20:54	1
PCB-1254	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 20:54	1
PCB-1260	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 20:54	1
PCB-1262	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 20:54	1
PCB-1268	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 20:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*75*		*30 - 150*	*08/24/18 19:08*	*08/25/18 20:54*	*1*
Tetrachloro-m-xylene	*74*		*30 - 150*	*08/24/18 19:08*	*08/25/18 20:54*	*1*
DCB Decachlorobiphenyl	*85*		*30 - 150*	*08/24/18 19:08*	*08/25/18 20:54*	*1*
DCB Decachlorobiphenyl	*81*		*30 - 150*	*08/24/18 19:08*	*08/25/18 20:54*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.21**		0.12	0.078	mg/L			08/26/18 13:05	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/26/18 13:05	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 21:33	2
Arsenic	**14.8**		2.0	0.77	ug/L		08/29/18 10:35	08/29/18 21:33	2
Barium	**46.4**		4.0	1.1	ug/L		08/29/18 10:35	08/29/18 21:33	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 21:33	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 21:33	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:33	2
Chromium	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:33	2
Copper	1.9	U	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 21:33	2
Manganese	**6240**		8.0	2.7	ug/L		08/29/18 10:35	08/29/18 21:33	2
Nickel	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:33	2
Lead	0.37	U	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 21:33	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 21:33	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 21:33	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 21:33	2
Zinc	5.4	U	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 21:33	2
Aluminum	**52.1**		40.0	15.0	ug/L		08/29/18 10:35	08/29/18 21:33	2
Sodium	**3820**		200	75.7	ug/L		08/29/18 10:35	08/29/18 21:33	2
Magnesium	**4410**		200	65.7	ug/L		08/29/18 10:35	08/29/18 21:33	2

Client Sample ID: OB-32-082218

Lab Sample ID: 460-163188-7

Date Collected: 08/22/18 16:15

Matrix: Water

Date Received: 08/23/18 11:25

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**2220**		200	64.9	ug/L		08/29/18 10:35	08/29/18 21:33	2
Calcium	**30200**		200	67.6	ug/L		08/29/18 10:35	08/29/18 21:33	2
Iron	**51700**		120	45.7	ug/L		08/29/18 10:35	08/29/18 21:33	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 21:33	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 16:04	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 16:04	2
Barium	**26.2**		4.0	1.1	ug/L		08/27/18 09:32	08/27/18 16:04	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 16:04	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 16:04	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:04	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:04	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 16:04	2
Manganese	**6310**		8.0	2.7	ug/L		08/27/18 09:32	08/27/18 16:04	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:04	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 16:04	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 16:04	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 16:04	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 16:04	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 16:04	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 16:04	2
Sodium	**3050**		200	75.7	ug/L		08/27/18 09:32	08/27/18 16:04	2
Magnesium	**3820**		200	65.7	ug/L		08/27/18 09:32	08/27/18 16:04	2
Potassium	**2190**		200	64.9	ug/L		08/27/18 09:32	08/27/18 16:04	2
Calcium	**29900**		200	67.6	ug/L		08/27/18 09:32	08/27/18 16:04	2
Iron	**2950**		120	45.7	ug/L		08/27/18 09:32	08/27/18 16:04	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 16:04	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 15:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.0072**	**J**	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 12:59	1
Bicarbonate Alkalinity as CaCO3	**128**		5.0	5.0	mg/L			08/25/18 15:12	1
Alkalinity	**128**		5.0	5.0	mg/L			08/25/18 15:12	1

Client Sample ID: OB-19-082218

Lab Sample ID: 460-163188-9

Date Collected: 08/22/18 15:50

Matrix: Water

Date Received: 08/23/18 11:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 04:44	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-19-082218
Date Collected: 08/22/18 15:50
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 04:44	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 04:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 130*		*08/28/18 04:44*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 14:41	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 14:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 14:41	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 14:41	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 14:41	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 14:41	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 14:41	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 14:41	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 14:41	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 14:41	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 14:41	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 14:41	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 14:41	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 14:41	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 14:41	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 14:41	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 14:41	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 14:41	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 14:41	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 14:41	1
Carbon disulfide	**0.23**	**J**	1.0	0.16	ug/L			08/27/18 14:41	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 14:41	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 14:41	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 14:41	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 14:41	1
Chloroethane	**1.2**		1.0	0.32	ug/L			08/27/18 14:41	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 14:41	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 14:41	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 14:41	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 14:41	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 14:41	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 14:41	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 14:41	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 14:41	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 14:41	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 14:41	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 14:41	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 14:41	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 14:41	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 14:41	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 14:41	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 14:41	1

Client Sample ID: OB-19-082218

Date Collected: 08/22/18 15:50
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 14:41	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 14:41	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 14:41	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 14:41	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 14:41	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 14:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 14:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*08/27/18 14:41*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*08/27/18 14:41*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*08/27/18 14:41*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/27/18 14:41*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.97**		0.20	0.016	ug/L		08/25/18 10:18	08/26/18 02:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*10 - 150*	*08/25/18 10:18*	*08/26/18 02:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.052	0.016	ug/L		08/28/18 20:11	08/29/18 14:28	1
Benzo[a]pyrene	0.023	U	0.052	0.023	ug/L		08/28/18 20:11	08/29/18 14:28	1
Benzo[b]fluoranthene	0.025	U	0.052	0.025	ug/L		08/28/18 20:11	08/29/18 14:28	1
Bis(2-chloroethyl)ether	0.027	U	0.031	0.027	ug/L		08/28/18 20:11	08/29/18 14:28	1
Dibenz(a,h)anthracene	0.012	U *	0.052	0.012	ug/L		08/28/18 20:11	08/29/18 14:28	1
Hexachlorobenzene	0.014	U	0.021	0.014	ug/L		08/28/18 20:11	08/29/18 14:28	1
Indeno[1,2,3-cd]pyrene	0.038	U	0.052	0.038	ug/L		08/28/18 20:11	08/29/18 14:28	1
N-Nitrosodimethylamine	0.12	U	0.21	0.12	ug/L		08/28/18 20:11	08/29/18 14:28	1
Pentachlorophenol	0.16	U	0.21	0.16	ug/L		08/28/18 20:11	08/29/18 14:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.30	U	10	0.30	ug/L		08/28/18 20:11	08/29/18 14:30	1
2-Chlorophenol	0.39	U	10	0.39	ug/L		08/28/18 20:11	08/29/18 14:30	1
2-Methylphenol	0.27	U	10	0.27	ug/L		08/28/18 20:11	08/29/18 14:30	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 14:30	1
2-Nitrophenol	0.78	U	10	0.78	ug/L		08/28/18 20:11	08/29/18 14:30	1
2,4-Dimethylphenol	0.25	U	10	0.25	ug/L		08/28/18 20:11	08/29/18 14:30	1
2,4-Dichlorophenol	0.44	U	10	0.44	ug/L		08/28/18 20:11	08/29/18 14:30	1
4-Chloro-3-methylphenol	0.60	U	10	0.60	ug/L		08/28/18 20:11	08/29/18 14:30	1
2,4,6-Trichlorophenol	0.31	U	10	0.31	ug/L		08/28/18 20:11	08/29/18 14:30	1
2,4,5-Trichlorophenol	0.29	U	10	0.29	ug/L		08/28/18 20:11	08/29/18 14:30	1
2,4-Dinitrotoluene	1.0	U	2.1	1.0	ug/L		08/28/18 20:11	08/29/18 14:30	1
4-Nitrophenol	0.72	U	21	0.72	ug/L		08/28/18 20:11	08/29/18 14:30	1
4,6-Dinitro-2-methylphenol	14	U	21	14	ug/L		08/28/18 20:11	08/29/18 14:30	1
N-Nitrosodi-n-propylamine	0.45	U	1.0	0.45	ug/L		08/28/18 20:11	08/29/18 14:30	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-19-082218
Date Collected: 08/22/18 15:50
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.1	1.2	ug/L		08/28/18 20:11	08/29/18 14:30	1
Nitrobenzene	0.59	U	1.0	0.59	ug/L		08/28/18 20:11	08/29/18 14:30	1
Isophorone	0.83	U	10	0.83	ug/L		08/28/18 20:11	08/29/18 14:30	1
Naphthalene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 14:30	1
4-Chloroaniline	2.0	U	10	2.0	ug/L		08/28/18 20:11	08/29/18 14:30	1
Hexachlorobutadiene	0.81	U	1.0	0.81	ug/L		08/28/18 20:11	08/29/18 14:30	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 14:30	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/28/18 20:11	08/29/18 14:30	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 14:30	1
2-Nitroaniline	0.49	U	10	0.49	ug/L		08/28/18 20:11	08/29/18 14:30	1
Dimethyl phthalate	0.80	U	10	0.80	ug/L		08/28/18 20:11	08/29/18 14:30	1
Acenaphthylene	0.86	U	10	0.86	ug/L		08/28/18 20:11	08/29/18 14:30	1
2,6-Dinitrotoluene	0.41	U	2.1	0.41	ug/L		08/28/18 20:11	08/29/18 14:30	1
3-Nitroaniline	1.0	U	10	1.0	ug/L		08/28/18 20:11	08/29/18 14:30	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 14:30	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 14:30	1
2,4-Dinitrophenol	15	U	21	15	ug/L		08/28/18 20:11	08/29/18 14:30	1
Diethyl phthalate	1.0	U	10	1.0	ug/L		08/28/18 20:11	08/29/18 14:30	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/28/18 20:11	08/29/18 14:30	1
Fluorene	0.95	U	10	0.95	ug/L		08/28/18 20:11	08/29/18 14:30	1
4-Nitroaniline	0.57	U	10	0.57	ug/L		08/28/18 20:11	08/29/18 14:30	1
N-Nitrosodiphenylamine	0.93	U	10	0.93	ug/L		08/28/18 20:11	08/29/18 14:30	1
4-Bromophenyl phenyl ether	0.78	U	10	0.78	ug/L		08/28/18 20:11	08/29/18 14:30	1
Phenanthrene	0.60	U	10	0.60	ug/L		08/28/18 20:11	08/29/18 14:30	1
Anthracene	0.66	U	10	0.66	ug/L		08/28/18 20:11	08/29/18 14:30	1
Carbazole	0.71	U	10	0.71	ug/L		08/28/18 20:11	08/29/18 14:30	1
Di-n-butyl phthalate	0.88	U	10	0.88	ug/L		08/28/18 20:11	08/29/18 14:30	1
Fluoranthene	0.88	U	10	0.88	ug/L		08/28/18 20:11	08/29/18 14:30	1
Pyrene	1.7	U	10	1.7	ug/L		08/28/18 20:11	08/29/18 14:30	1
Butyl benzyl phthalate	0.89	U	10	0.89	ug/L		08/28/18 20:11	08/29/18 14:30	1
Chrysene	0.94	U	2.1	0.94	ug/L		08/28/18 20:11	08/29/18 14:30	1
Bis(2-ethylhexyl) phthalate	1.8	U	2.1	1.8	ug/L		08/28/18 20:11	08/29/18 14:30	1
Di-n-octyl phthalate	5.0	U	10	5.0	ug/L		08/28/18 20:11	08/29/18 14:30	1
Benzo[k]fluoranthene	0.70	U	1.0	0.70	ug/L		08/28/18 20:11	08/29/18 14:30	1
Benzo[g,h,i]perylene	1.5	U	10	1.5	ug/L		08/28/18 20:11	08/29/18 14:30	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 14:30	1
Acetophenone	0.82	U	10	0.82	ug/L		08/28/18 20:11	08/29/18 14:30	1
Benzaldehyde	0.62	U	10	0.62	ug/L		08/28/18 20:11	08/29/18 14:30	1
Caprolactam	0.71	U	10	0.71	ug/L		08/28/18 20:11	08/29/18 14:30	1
Atrazine	1.4	U	2.1	1.4	ug/L		08/28/18 20:11	08/29/18 14:30	1
2,2'-oxybis[1-chloropropane]	0.66	U	10	0.66	ug/L		08/28/18 20:11	08/29/18 14:30	1
1,2,4,5-Tetrachlorobenzene	1.3	U	10	1.3	ug/L		08/28/18 20:11	08/29/18 14:30	1
2,3,4,6-Tetrachlorophenol	0.78	U	10	0.78	ug/L		08/28/18 20:11	08/29/18 14:30	1
3,3'-Dichlorobenzidine	1.5	U	10	1.5	ug/L		08/28/18 20:11	08/29/18 14:30	1
Bis(2-chloroethoxy)methane	0.25	U	10	0.25	ug/L		08/28/18 20:11	08/29/18 14:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexadecanoic acid, butyl ester	*8.8*	*J N*	*ug/L*		*10.30*	*111-06-8*	*08/28/18 20:11*	*08/29/18 14:30*	*1*

Client Sample ID: OB-19-082218

Date Collected: 08/22/18 15:50
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-9

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	92		30 - 130	08/28/18 20:11	08/29/18 14:30	1
Phenol-d5 (Surr)	36		15 - 110	08/28/18 20:11	08/29/18 14:30	1
Terphenyl-d14 (Surr)	94		30 - 130	08/28/18 20:11	08/29/18 14:30	1
2,4,6-Tribromophenol (Surr)	94		15 - 110	08/28/18 20:11	08/29/18 14:30	1
2-Fluorophenol (Surr)	51		15 - 110	08/28/18 20:11	08/29/18 14:30	1
2-Fluorobiphenyl	92		30 - 130	08/28/18 20:11	08/29/18 14:30	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 21:10	1
PCB-1016	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 21:10	1
PCB-1221	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 21:10	1
PCB-1232	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 21:10	1
PCB-1242	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 21:10	1
PCB-1248	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 21:10	1
PCB-1254	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 21:10	1
PCB-1260	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 21:10	1
PCB-1262	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 21:10	1
PCB-1268	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 21:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		30 - 150	08/24/18 19:08	08/25/18 21:10	1
Tetrachloro-m-xylene	81		30 - 150	08/24/18 19:08	08/25/18 21:10	1
DCB Decachlorobiphenyl	86		30 - 150	08/24/18 19:08	08/25/18 21:10	1
DCB Decachlorobiphenyl	90		30 - 150	08/24/18 19:08	08/25/18 21:10	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.51**		0.12	0.078	mg/L			08/26/18 13:57	1
Sulfate	**2.03**		0.60	0.33	mg/L			08/26/18 13:57	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 21:36	2
Arsenic	**0.82**	**J**	2.0	0.77	ug/L		08/29/18 10:35	08/29/18 21:36	2
Barium	**103**		4.0	1.1	ug/L		08/29/18 10:35	08/29/18 21:36	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 21:36	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 21:36	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:36	2
Chromium	**1.4**	**J**	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:36	2
Copper	**4.5**		4.0	1.9	ug/L		08/29/18 10:35	08/29/18 21:36	2
Manganese	**316**		8.0	2.7	ug/L		08/29/18 10:35	08/29/18 21:36	2
Nickel	**1.4**	**J**	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:36	2
Lead	**1.8**		1.2	0.37	ug/L		08/29/18 10:35	08/29/18 21:36	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 21:36	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 21:36	2
Vanadium	**2.8**	**J**	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 21:36	2
Zinc	**17.7**		16.0	5.4	ug/L		08/29/18 10:35	08/29/18 21:36	2
Aluminum	**195**		40.0	15.0	ug/L		08/29/18 10:35	08/29/18 21:36	2
Sodium	**3350**		200	75.7	ug/L		08/29/18 10:35	08/29/18 21:36	2
Magnesium	**3180**		200	65.7	ug/L		08/29/18 10:35	08/29/18 21:36	2

Client Sample ID: OB-19-082218

Lab Sample ID: 460-163188-9

Date Collected: 08/22/18 15:50

Matrix: Water

Date Received: 08/23/18 11:25

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**1180**		200	64.9	ug/L		08/29/18 10:35	08/29/18 21:36	2
Calcium	**15600**		200	67.6	ug/L		08/29/18 10:35	08/29/18 21:36	2
Iron	**22100**		120	45.7	ug/L		08/29/18 10:35	08/29/18 21:36	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 21:36	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 16:08	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 16:08	2
Barium	**98.0**		4.0	1.1	ug/L		08/27/18 09:32	08/27/18 16:08	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 16:08	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 16:08	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:08	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:08	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 16:08	2
Manganese	**291**		8.0	2.7	ug/L		08/27/18 09:32	08/27/18 16:08	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:08	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 16:08	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 16:08	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 16:08	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 16:08	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 16:08	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 16:08	2
Sodium	**2810**		200	75.7	ug/L		08/27/18 09:32	08/27/18 16:08	2
Magnesium	**2830**		200	65.7	ug/L		08/27/18 09:32	08/27/18 16:08	2
Potassium	**1190**		200	64.9	ug/L		08/27/18 09:32	08/27/18 16:08	2
Calcium	**16300**		200	67.6	ug/L		08/27/18 09:32	08/27/18 16:08	2
Iron	45.7	U	120	45.7	ug/L		08/27/18 09:32	08/27/18 16:08	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 16:08	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 15:58	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.0025**	**J**	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 13:00	1
Bicarbonate Alkalinity as CaCO3	**57.9**		5.0	5.0	mg/L			08/25/18 15:19	1
Alkalinity	**57.9**		5.0	5.0	mg/L			08/25/18 15:19	1

Client Sample ID: OB-11R-082218

Lab Sample ID: 460-163188-10

Date Collected: 08/22/18 14:10

Matrix: Water

Date Received: 08/23/18 11:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 11:07	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-11R-082218
Date Collected: 08/22/18 14:10
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 11:07	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 11:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*08/28/18 11:07*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 15:04	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 15:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 15:04	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 15:04	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 15:04	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 15:04	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 15:04	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 15:04	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 15:04	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 15:04	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 15:04	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 15:04	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 15:04	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 15:04	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 15:04	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 15:04	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 15:04	1
Benzene	**2.0**		1.0	0.43	ug/L			08/27/18 15:04	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 15:04	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 15:04	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/27/18 15:04	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 15:04	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 15:04	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 15:04	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 15:04	1
Chloroethane	**27**		1.0	0.32	ug/L			08/27/18 15:04	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 15:04	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 15:04	1
cis-1,2-Dichloroethene	**0.35**	**J**	1.0	0.22	ug/L			08/27/18 15:04	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 15:04	1
Cyclohexane	**2.4**		1.0	0.32	ug/L			08/27/18 15:04	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 15:04	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 15:04	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 15:04	1
Isopropylbenzene	**0.75**	**J**	1.0	0.34	ug/L			08/27/18 15:04	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 15:04	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 15:04	1
Methylcyclohexane	**0.67**	**J**	1.0	0.26	ug/L			08/27/18 15:04	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 15:04	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 15:04	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 15:04	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 15:04	1

Client Sample ID: OB-11R-082218
Date Collected: 08/22/18 14:10
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 15:04	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 15:04	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 15:04	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 15:04	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 15:04	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 15:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*6.2*	*J*	*ug/L*		*3.30*			*08/27/18 15:04*	*1*
Cyclopentane, methyl-	*17*	*J N*	*ug/L*		*4.07*	*96-37-7*		*08/27/18 15:04*	*1*
Indane	*12*	*J N*	*ug/L*		*11.07*	*496-11-7*		*08/27/18 15:04*	*1*
Benzene, 1-ethyl-2,4-dimethyl-	*6.0*	*J N*	*ug/L*		*11.35*	*874-41-9*		*08/27/18 15:04*	*1*
1-Phenyl-1-butene	*11*	*J N*	*ug/L*		*11.43*	*824-90-8*		*08/27/18 15:04*	*1*
Benzene, 1,2,4,5-tetramethyl-	*14*	*J N*	*ug/L*		*11.60*	*95-93-2*		*08/27/18 15:04*	*1*
Unknown	*5.8*	*J*	*ug/L*		*11.80*			*08/27/18 15:04*	*1*
Benzene, 2-ethenyl-1,4-dimethyl-	*23*	*J N*	*ug/L*		*11.90*	*2039-89-6*		*08/27/18 15:04*	*1*
Unknown	*7.9*	*J*	*ug/L*		*12.10*			*08/27/18 15:04*	*1*
1H-Indene, 2,3-dihydro-1,6-dimethyl-	*19*	*J N*	*ug/L*		*12.19*	*17059-48-2*		*08/27/18 15:04*	*1*
Unknown	*5.6*	*J*	*ug/L*		*12.46*			*08/27/18 15:04*	*1*
Unknown	*6.3*	*J*	*ug/L*		*12.84*			*08/27/18 15:04*	*1*
Unknown	*7.7*	*J*	*ug/L*		*12.95*			*08/27/18 15:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*08/27/18 15:04*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*08/27/18 15:04*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/27/18 15:04*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/27/18 15:04*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.7**		0.20	0.016	ug/L		08/25/18 10:18	08/26/18 03:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*10 - 150*	*08/25/18 10:18*	*08/26/18 03:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.052	0.016	ug/L		08/28/18 20:11	08/29/18 14:49	1
Benzo[a]pyrene	0.023	U	0.052	0.023	ug/L		08/28/18 20:11	08/29/18 14:49	1
Benzo[b]fluoranthene	0.025	U	0.052	0.025	ug/L		08/28/18 20:11	08/29/18 14:49	1
Bis(2-chloroethyl)ether	0.027	U	0.031	0.027	ug/L		08/28/18 20:11	08/29/18 14:49	1
Dibenz(a,h)anthracene	0.012	U *	0.052	0.012	ug/L		08/28/18 20:11	08/29/18 14:49	1
Hexachlorobenzene	0.014	U	0.021	0.014	ug/L		08/28/18 20:11	08/29/18 14:49	1
Indeno[1,2,3-cd]pyrene	0.038	U	0.052	0.038	ug/L		08/28/18 20:11	08/29/18 14:49	1
N-Nitrosodimethylamine	0.12	U	0.21	0.12	ug/L		08/28/18 20:11	08/29/18 14:49	1
Pentachlorophenol	0.16	U	0.21	0.16	ug/L		08/28/18 20:11	08/29/18 14:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.30	U	10	0.30	ug/L		08/28/18 20:11	08/29/18 14:51	1
2-Chlorophenol	0.39	U	10	0.39	ug/L		08/28/18 20:11	08/29/18 14:51	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-11R-082218
Date Collected: 08/22/18 14:10
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	0.27	U	10	0.27	ug/L		08/28/18 20:11	08/29/18 14:51	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 14:51	1
2-Nitrophenol	0.78	U	10	0.78	ug/L		08/28/18 20:11	08/29/18 14:51	1
2,4-Dimethylphenol	0.25	U	10	0.25	ug/L		08/28/18 20:11	08/29/18 14:51	1
2,4-Dichlorophenol	0.44	U	10	0.44	ug/L		08/28/18 20:11	08/29/18 14:51	1
4-Chloro-3-methylphenol	0.60	U	10	0.60	ug/L		08/28/18 20:11	08/29/18 14:51	1
2,4,6-Trichlorophenol	0.31	U	10	0.31	ug/L		08/28/18 20:11	08/29/18 14:51	1
2,4,5-Trichlorophenol	0.29	U	10	0.29	ug/L		08/28/18 20:11	08/29/18 14:51	1
2,4-Dinitrotoluene	1.0	U	2.1	1.0	ug/L		08/28/18 20:11	08/29/18 14:51	1
4-Nitrophenol	0.72	U	21	0.72	ug/L		08/28/18 20:11	08/29/18 14:51	1
4,6-Dinitro-2-methylphenol	14	U	21	14	ug/L		08/28/18 20:11	08/29/18 14:51	1
N-Nitrosodi-n-propylamine	0.45	U	1.0	0.45	ug/L		08/28/18 20:11	08/29/18 14:51	1
Hexachloroethane	1.2	U	2.1	1.2	ug/L		08/28/18 20:11	08/29/18 14:51	1
Nitrobenzene	0.59	U	1.0	0.59	ug/L		08/28/18 20:11	08/29/18 14:51	1
Isophorone	0.83	U	10	0.83	ug/L		08/28/18 20:11	08/29/18 14:51	1
Naphthalene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 14:51	1
4-Chloroaniline	2.0	U	10	2.0	ug/L		08/28/18 20:11	08/29/18 14:51	1
Hexachlorobutadiene	0.81	U	1.0	0.81	ug/L		08/28/18 20:11	08/29/18 14:51	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 14:51	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/28/18 20:11	08/29/18 14:51	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 14:51	1
2-Nitroaniline	0.49	U	10	0.49	ug/L		08/28/18 20:11	08/29/18 14:51	1
Dimethyl phthalate	0.80	U	10	0.80	ug/L		08/28/18 20:11	08/29/18 14:51	1
Acenaphthylene	0.86	U	10	0.86	ug/L		08/28/18 20:11	08/29/18 14:51	1
2,6-Dinitrotoluene	0.41	U	2.1	0.41	ug/L		08/28/18 20:11	08/29/18 14:51	1
3-Nitroaniline	1.0	U	10	1.0	ug/L		08/28/18 20:11	08/29/18 14:51	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 14:51	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 14:51	1
2,4-Dinitrophenol	15	U	21	15	ug/L		08/28/18 20:11	08/29/18 14:51	1
Diethyl phthalate	1.0	U	10	1.0	ug/L		08/28/18 20:11	08/29/18 14:51	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/28/18 20:11	08/29/18 14:51	1
Fluorene	0.95	U	10	0.95	ug/L		08/28/18 20:11	08/29/18 14:51	1
4-Nitroaniline	0.57	U	10	0.57	ug/L		08/28/18 20:11	08/29/18 14:51	1
N-Nitrosodiphenylamine	0.93	U	10	0.93	ug/L		08/28/18 20:11	08/29/18 14:51	1
4-Bromophenyl phenyl ether	0.78	U	10	0.78	ug/L		08/28/18 20:11	08/29/18 14:51	1
Phenanthrene	0.60	U	10	0.60	ug/L		08/28/18 20:11	08/29/18 14:51	1
Anthracene	0.66	U	10	0.66	ug/L		08/28/18 20:11	08/29/18 14:51	1
Carbazole	0.71	U	10	0.71	ug/L		08/28/18 20:11	08/29/18 14:51	1
Di-n-butyl phthalate	0.88	U	10	0.88	ug/L		08/28/18 20:11	08/29/18 14:51	1
Fluoranthene	0.88	U	10	0.88	ug/L		08/28/18 20:11	08/29/18 14:51	1
Pyrene	1.7	U	10	1.7	ug/L		08/28/18 20:11	08/29/18 14:51	1
Butyl benzyl phthalate	0.89	U	10	0.89	ug/L		08/28/18 20:11	08/29/18 14:51	1
Chrysene	0.94	U	2.1	0.94	ug/L		08/28/18 20:11	08/29/18 14:51	1
Bis(2-ethylhexyl) phthalate	1.8	U	2.1	1.8	ug/L		08/28/18 20:11	08/29/18 14:51	1
Di-n-octyl phthalate	5.0	U	10	5.0	ug/L		08/28/18 20:11	08/29/18 14:51	1
Benzo[k]fluoranthene	0.70	U	1.0	0.70	ug/L		08/28/18 20:11	08/29/18 14:51	1
Benzo[g,h,i]perylene	1.5	U	10	1.5	ug/L		08/28/18 20:11	08/29/18 14:51	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 14:51	1
Acetophenone	0.82	U	10	0.82	ug/L		08/28/18 20:11	08/29/18 14:51	1

Client Sample ID: OB-11R-082218
Date Collected: 08/22/18 14:10
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzaldehyde	0.62	U	10	0.62	ug/L		08/28/18 20:11	08/29/18 14:51	1
Caprolactam	0.71	U	10	0.71	ug/L		08/28/18 20:11	08/29/18 14:51	1
Atrazine	1.4	U	2.1	1.4	ug/L		08/28/18 20:11	08/29/18 14:51	1
2,2'-oxybis[1-chloropropane]	0.66	U	10	0.66	ug/L		08/28/18 20:11	08/29/18 14:51	1
1,2,4,5-Tetrachlorobenzene	1.3	U	10	1.3	ug/L		08/28/18 20:11	08/29/18 14:51	1
2,3,4,6-Tetrachlorophenol	0.78	U	10	0.78	ug/L		08/28/18 20:11	08/29/18 14:51	1
3,3'-Dichlorobenzidine	1.5	U	10	1.5	ug/L		08/28/18 20:11	08/29/18 14:51	1
Bis(2-chloroethoxy)methane	0.25	U	10	0.25	ug/L		08/28/18 20:11	08/29/18 14:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*11*	*J*	*ug/L*		*6.91*		*08/28/18 20:11*	*08/29/18 14:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*93*		*30 - 130*	*08/28/18 20:11*	*08/29/18 14:51*	*1*
Phenol-d5 (Surr)	*37*		*15 - 110*	*08/28/18 20:11*	*08/29/18 14:51*	*1*
Terphenyl-d14 (Surr)	*98*		*30 - 130*	*08/28/18 20:11*	*08/29/18 14:51*	*1*
2,4,6-Tribromophenol (Surr)	*104*		*15 - 110*	*08/28/18 20:11*	*08/29/18 14:51*	*1*
2-Fluorophenol (Surr)	*53*		*15 - 110*	*08/28/18 20:11*	*08/29/18 14:51*	*1*
2-Fluorobiphenyl	*95*		*30 - 130*	*08/28/18 20:11*	*08/29/18 14:51*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 21:26	1
PCB-1016	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 21:26	1
PCB-1221	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 21:26	1
PCB-1232	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 21:26	1
PCB-1242	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 21:26	1
PCB-1248	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 21:26	1
PCB-1254	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 21:26	1
PCB-1260	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 21:26	1
PCB-1262	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 21:26	1
PCB-1268	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*69*		*30 - 150*	*08/24/18 19:08*	*08/25/18 21:26*	*1*
Tetrachloro-m-xylene	*68*		*30 - 150*	*08/24/18 19:08*	*08/25/18 21:26*	*1*
DCB Decachlorobiphenyl	*80*		*30 - 150*	*08/24/18 19:08*	*08/25/18 21:26*	*1*
DCB Decachlorobiphenyl	*79*		*30 - 150*	*08/24/18 19:08*	*08/25/18 21:26*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.05**		0.12	0.078	mg/L			08/26/18 14:10	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/26/18 14:10	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 21:38	2
Arsenic	**25.8**		2.0	0.77	ug/L		08/29/18 10:35	08/29/18 21:38	2
Barium	**92.9**		4.0	1.1	ug/L		08/29/18 10:35	08/29/18 21:38	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 21:38	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 21:38	2

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-11R-082218
Date Collected: 08/22/18 14:10
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-10
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**2.5**	**J**	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:38	2
Chromium	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:38	2
Copper	1.9	U	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 21:38	2
Manganese	**10800**		40.0	13.5	ug/L		08/29/18 10:35	08/30/18 15:48	10
Nickel	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:38	2
Lead	0.37	U	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 21:38	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 21:38	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 21:38	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 21:38	2
Zinc	5.4	U	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 21:38	2
Aluminum	**109**		40.0	15.0	ug/L		08/29/18 10:35	08/29/18 21:38	2
Sodium	**4150**		200	75.7	ug/L		08/29/18 10:35	08/29/18 21:38	2
Magnesium	**7780**		200	65.7	ug/L		08/29/18 10:35	08/29/18 21:38	2
Potassium	**2950**		200	64.9	ug/L		08/29/18 10:35	08/29/18 21:38	2
Calcium	**55800**		200	67.6	ug/L		08/29/18 10:35	08/29/18 21:38	2
Iron	**76100**		120	45.7	ug/L		08/29/18 10:35	08/29/18 21:38	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 21:38	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 16:11	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 16:11	2
Barium	**45.0**		4.0	1.1	ug/L		08/27/18 09:32	08/27/18 16:11	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 16:11	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 16:11	2
Cobalt	**1.9**	**J**	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:11	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:11	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 16:11	2
Manganese	**9950**		8.0	2.7	ug/L		08/27/18 09:32	08/27/18 16:11	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:11	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 16:11	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 16:11	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 16:11	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 16:11	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 16:11	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 16:11	2
Sodium	**3240**		200	75.7	ug/L		08/27/18 09:32	08/27/18 16:11	2
Magnesium	**6520**		200	65.7	ug/L		08/27/18 09:32	08/27/18 16:11	2
Potassium	**2830**		200	64.9	ug/L		08/27/18 09:32	08/27/18 16:11	2
Calcium	**54300**		200	67.6	ug/L		08/27/18 09:32	08/27/18 16:11	2
Iron	**8220**		120	45.7	ug/L		08/27/18 09:32	08/27/18 16:11	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 16:11	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 16:00	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:07	1

Client Sample ID: OB-11R-082218

Lab Sample ID: 460-163188-10

Date Collected: 08/22/18 14:10

Matrix: Water

Date Received: 08/23/18 11:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0061	J	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 13:01	1
Bicarbonate Alkalinity as CaCO3	227		5.0	5.0	mg/L			08/25/18 15:27	1
Alkalinity	227		5.0	5.0	mg/L			08/25/18 15:27	1

Client Sample ID: RW-5A-082218

Lab Sample ID: 460-163188-11

Date Collected: 08/22/18 12:30

Matrix: Water

Date Received: 08/23/18 11:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 11:31	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 11:31	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 11:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*70 - 130*		*08/28/18 11:31*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 15:27	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 15:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 15:27	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 15:27	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 15:27	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 15:27	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 15:27	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 15:27	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 15:27	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 15:27	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 15:27	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 15:27	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 15:27	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 15:27	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 15:27	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 15:27	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 15:27	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 15:27	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 15:27	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 15:27	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/27/18 15:27	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 15:27	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 15:27	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 15:27	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 15:27	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 15:27	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 15:27	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 15:27	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 15:27	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 15:27	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 15:27	1

Client Sample ID: RW-5A-082218
Date Collected: 08/22/18 12:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 15:27	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 15:27	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 15:27	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 15:27	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 15:27	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 15:27	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 15:27	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 15:27	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 15:27	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 15:27	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 15:27	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 15:27	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 15:27	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 15:27	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 15:27	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 15:27	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 15:27	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 15:27*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*08/27/18 15:27*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*08/27/18 15:27*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/27/18 15:27*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/27/18 15:27*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/25/18 10:18	08/26/18 03:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*10 - 150*	*08/25/18 10:18*	*08/26/18 03:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:05	08/26/18 21:41	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:05	08/26/18 21:41	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:05	08/26/18 21:41	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:05	08/26/18 21:41	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:05	08/26/18 21:41	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 10:05	08/26/18 21:41	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:05	08/26/18 21:41	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:05	08/26/18 21:41	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:05	08/26/18 21:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:05	08/26/18 20:46	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:05	08/26/18 20:46	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:05	08/26/18 20:46	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: RW-5A-082218
Date Collected: 08/22/18 12:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 20:46	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 20:46	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 20:46	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:05	08/26/18 20:46	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 20:46	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:05	08/26/18 20:46	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:05	08/26/18 20:46	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:05	08/26/18 20:46	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:05	08/26/18 20:46	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:05	08/26/18 20:46	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:05	08/26/18 20:46	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:05	08/26/18 20:46	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:05	08/26/18 20:46	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:05	08/26/18 20:46	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 20:46	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:05	08/26/18 20:46	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:05	08/26/18 20:46	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 20:46	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:05	08/26/18 20:46	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 20:46	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:05	08/26/18 20:46	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:05	08/26/18 20:46	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:05	08/26/18 20:46	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:05	08/26/18 20:46	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:05	08/26/18 20:46	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 20:46	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 20:46	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:05	08/26/18 20:46	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:05	08/26/18 20:46	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 20:46	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:05	08/26/18 20:46	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:05	08/26/18 20:46	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:05	08/26/18 20:46	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 20:46	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 20:46	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 20:46	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:05	08/26/18 20:46	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 20:46	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 20:46	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:05	08/26/18 20:46	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:05	08/26/18 20:46	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:05	08/26/18 20:46	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:05	08/26/18 20:46	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:05	08/26/18 20:46	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:05	08/26/18 20:46	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 20:46	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 20:46	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:05	08/26/18 20:46	1
Benzaldehyde	0.59	U *	10	0.59	ug/L		08/25/18 10:05	08/26/18 20:46	1

Client Sample ID: RW-5A-082218
Date Collected: 08/22/18 12:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:05	08/26/18 20:46	1
Atrazine	1.3	U *	2.0	1.3	ug/L		08/25/18 10:05	08/26/18 20:46	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 20:46	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 20:46	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 20:46	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 20:46	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 20:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*150*	*J*	*ug/L*		*3.75*		*08/25/18 10:05*	*08/26/18 20:46*	*1*
Unknown	*16*	*J*	*ug/L*		*5.76*		*08/25/18 10:05*	*08/26/18 20:46*	*1*
Unknown	*120*	*J*	*ug/L*		*8.21*		*08/25/18 10:05*	*08/26/18 20:46*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*105*		*30 - 130*	*08/25/18 10:05*	*08/26/18 20:46*	*1*
Phenol-d5 (Surr)	*31*		*15 - 110*	*08/25/18 10:05*	*08/26/18 20:46*	*1*
Terphenyl-d14 (Surr)	*99*		*30 - 130*	*08/25/18 10:05*	*08/26/18 20:46*	*1*
2,4,6-Tribromophenol (Surr)	*105*		*15 - 110*	*08/25/18 10:05*	*08/26/18 20:46*	*1*
2-Fluorophenol (Surr)	*50*		*15 - 110*	*08/25/18 10:05*	*08/26/18 20:46*	*1*
2-Fluorobiphenyl	*94*		*30 - 130*	*08/25/18 10:05*	*08/26/18 20:46*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.41	0.12	ug/L		08/24/18 19:08	08/25/18 21:42	1
PCB-1016	0.12	U	0.41	0.12	ug/L		08/24/18 19:08	08/25/18 21:42	1
PCB-1221	0.12	U	0.41	0.12	ug/L		08/24/18 19:08	08/25/18 21:42	1
PCB-1232	0.12	U	0.41	0.12	ug/L		08/24/18 19:08	08/25/18 21:42	1
PCB-1242	0.12	U	0.41	0.12	ug/L		08/24/18 19:08	08/25/18 21:42	1
PCB-1248	0.12	U	0.41	0.12	ug/L		08/24/18 19:08	08/25/18 21:42	1
PCB-1254	0.11	U	0.41	0.11	ug/L		08/24/18 19:08	08/25/18 21:42	1
PCB-1260	0.11	U	0.41	0.11	ug/L		08/24/18 19:08	08/25/18 21:42	1
PCB-1262	0.11	U	0.41	0.11	ug/L		08/24/18 19:08	08/25/18 21:42	1
PCB-1268	0.11	U	0.41	0.11	ug/L		08/24/18 19:08	08/25/18 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*30 - 150*	*08/24/18 19:08*	*08/25/18 21:42*	*1*
Tetrachloro-m-xylene	*73*		*30 - 150*	*08/24/18 19:08*	*08/25/18 21:42*	*1*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*08/24/18 19:08*	*08/25/18 21:42*	*1*
DCB Decachlorobiphenyl	*81*		*30 - 150*	*08/24/18 19:08*	*08/25/18 21:42*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.90**		0.12	0.078	mg/L			08/26/18 14:23	1
Sulfate	**8.72**		0.60	0.33	mg/L			08/26/18 14:23	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 21:41	2
Arsenic	**2.1**		2.0	0.77	ug/L		08/29/18 10:35	08/29/18 21:41	2
Barium	**8.5**		4.0	1.1	ug/L		08/29/18 10:35	08/29/18 21:41	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 21:41	2

Client Sample ID: RW-5A-082218
Date Collected: 08/22/18 12:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-11
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 21:41	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:41	2
Chromium	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:41	2
Copper	1.9	U	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 21:41	2
Manganese	**293**		8.0	2.7	ug/L		08/29/18 10:35	08/29/18 21:41	2
Nickel	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:41	2
Lead	0.37	U	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 21:41	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 21:41	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 21:41	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 21:41	2
Zinc	5.4	U	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 21:41	2
Aluminum	**69.1**		40.0	15.0	ug/L		08/29/18 10:35	08/29/18 21:41	2
Sodium	**4450**		200	75.7	ug/L		08/29/18 10:35	08/29/18 21:41	2
Magnesium	**5950**		200	65.7	ug/L		08/29/18 10:35	08/29/18 21:41	2
Potassium	**4080**		200	64.9	ug/L		08/29/18 10:35	08/29/18 21:41	2
Calcium	**39800**		200	67.6	ug/L		08/29/18 10:35	08/29/18 21:41	2
Iron	**1000**		120	45.7	ug/L		08/29/18 10:35	08/29/18 21:41	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 21:41	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 16:15	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 16:15	2
Barium	**7.8**		4.0	1.1	ug/L		08/27/18 09:32	08/27/18 16:15	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 16:15	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 16:15	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:15	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:15	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 16:15	2
Manganese	**212**		8.0	2.7	ug/L		08/27/18 09:32	08/27/18 16:15	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:15	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 16:15	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 16:15	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 16:15	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 16:15	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 16:15	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 16:15	2
Sodium	**3720**		200	75.7	ug/L		08/27/18 09:32	08/27/18 16:15	2
Magnesium	**5370**		200	65.7	ug/L		08/27/18 09:32	08/27/18 16:15	2
Potassium	**4210**		200	64.9	ug/L		08/27/18 09:32	08/27/18 16:15	2
Calcium	**42000**		200	67.6	ug/L		08/27/18 09:32	08/27/18 16:15	2
Iron	45.7	U	120	45.7	ug/L		08/27/18 09:32	08/27/18 16:15	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 16:15	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 16:02	1

Client Sample ID: RW-5A-082218

Lab Sample ID: 460-163188-11

Date Collected: 08/22/18 12:30

Matrix: Water

Date Received: 08/23/18 11:25

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 13:02	1
Bicarbonate Alkalinity as CaCO3	**129**		5.0	5.0	mg/L			08/25/18 15:34	1
Alkalinity	**129**		5.0	5.0	mg/L			08/25/18 15:34	1

Client Sample ID: OB-21-082218

Lab Sample ID: 460-163188-12

Date Collected: 08/22/18 10:30

Matrix: Water

Date Received: 08/23/18 11:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 11:54	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 11:54	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 11:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*70 - 130*		*08/28/18 11:54*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 15:51	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 15:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 15:51	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 15:51	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 15:51	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 15:51	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 15:51	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 15:51	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 15:51	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 15:51	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 15:51	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 15:51	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 15:51	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 15:51	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 15:51	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 15:51	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 15:51	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 15:51	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 15:51	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 15:51	1
Carbon disulfide	**0.27**	**J**	1.0	0.16	ug/L			08/27/18 15:51	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 15:51	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 15:51	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 15:51	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 15:51	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 15:51	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 15:51	1

Client Sample ID: OB-21-082218
Date Collected: 08/22/18 10:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 15:51	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 15:51	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 15:51	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 15:51	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 15:51	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 15:51	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 15:51	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 15:51	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 15:51	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 15:51	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 15:51	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 15:51	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 15:51	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 15:51	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 15:51	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 15:51	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 15:51	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 15:51	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 15:51	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 15:51	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 15:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 15:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*08/27/18 15:51*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*08/27/18 15:51*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*08/27/18 15:51*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/27/18 15:51*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/25/18 10:18	08/26/18 03:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*08/25/18 10:18*	*08/26/18 03:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:05	08/26/18 22:02	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:05	08/26/18 22:02	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:05	08/26/18 22:02	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:05	08/26/18 22:02	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:05	08/26/18 22:02	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 10:05	08/26/18 22:02	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:05	08/26/18 22:02	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:05	08/26/18 22:02	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:05	08/26/18 22:02	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-21-082218
Date Collected: 08/22/18 10:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:05	08/26/18 21:07	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:05	08/26/18 21:07	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:05	08/26/18 21:07	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 21:07	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 21:07	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 21:07	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:05	08/26/18 21:07	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 21:07	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:05	08/26/18 21:07	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:05	08/26/18 21:07	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:05	08/26/18 21:07	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:05	08/26/18 21:07	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:05	08/26/18 21:07	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:05	08/26/18 21:07	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:05	08/26/18 21:07	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:05	08/26/18 21:07	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:05	08/26/18 21:07	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 21:07	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:05	08/26/18 21:07	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:05	08/26/18 21:07	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 21:07	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:05	08/26/18 21:07	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 21:07	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:05	08/26/18 21:07	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:05	08/26/18 21:07	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:05	08/26/18 21:07	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:05	08/26/18 21:07	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:05	08/26/18 21:07	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 21:07	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 21:07	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:05	08/26/18 21:07	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:05	08/26/18 21:07	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 21:07	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:05	08/26/18 21:07	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:05	08/26/18 21:07	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:05	08/26/18 21:07	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 21:07	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 21:07	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 21:07	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:05	08/26/18 21:07	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 21:07	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 21:07	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:05	08/26/18 21:07	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:05	08/26/18 21:07	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:05	08/26/18 21:07	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:05	08/26/18 21:07	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:05	08/26/18 21:07	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:05	08/26/18 21:07	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 21:07	1

Client Sample ID: OB-21-082218
Date Collected: 08/22/18 10:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 21:07	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:05	08/26/18 21:07	1
Benzaldehyde	0.59	U *	10	0.59	ug/L		08/25/18 10:05	08/26/18 21:07	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:05	08/26/18 21:07	1
Atrazine	1.3	U *	2.0	1.3	ug/L		08/25/18 10:05	08/26/18 21:07	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 21:07	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 21:07	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 21:07	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 21:07	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 21:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*140*	*J*	*ug/L*		*3.75*		*08/25/18 10:05*	*08/26/18 21:07*	*1*
Unknown	*14*	*J*	*ug/L*		*5.76*		*08/25/18 10:05*	*08/26/18 21:07*	*1*
Unknown	*110*	*J*	*ug/L*		*8.21*		*08/25/18 10:05*	*08/26/18 21:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*94*		*30 - 130*	*08/25/18 10:05*	*08/26/18 21:07*	*1*
Phenol-d5 (Surr)	*22*		*15 - 110*	*08/25/18 10:05*	*08/26/18 21:07*	*1*
Terphenyl-d14 (Surr)	*86*		*30 - 130*	*08/25/18 10:05*	*08/26/18 21:07*	*1*
2,4,6-Tribromophenol (Surr)	*96*		*15 - 110*	*08/25/18 10:05*	*08/26/18 21:07*	*1*
2-Fluorophenol (Surr)	*34*		*15 - 110*	*08/25/18 10:05*	*08/26/18 21:07*	*1*
2-Fluorobiphenyl	*80*		*30 - 130*	*08/25/18 10:05*	*08/26/18 21:07*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.41	0.12	ug/L		08/24/18 19:08	08/25/18 21:58	1
PCB-1016	0.12	U	0.41	0.12	ug/L		08/24/18 19:08	08/25/18 21:58	1
PCB-1221	0.12	U	0.41	0.12	ug/L		08/24/18 19:08	08/25/18 21:58	1
PCB-1232	0.12	U	0.41	0.12	ug/L		08/24/18 19:08	08/25/18 21:58	1
PCB-1242	0.12	U	0.41	0.12	ug/L		08/24/18 19:08	08/25/18 21:58	1
PCB-1248	0.12	U	0.41	0.12	ug/L		08/24/18 19:08	08/25/18 21:58	1
PCB-1254	0.11	U	0.41	0.11	ug/L		08/24/18 19:08	08/25/18 21:58	1
PCB-1260	0.11	U	0.41	0.11	ug/L		08/24/18 19:08	08/25/18 21:58	1
PCB-1262	0.11	U	0.41	0.11	ug/L		08/24/18 19:08	08/25/18 21:58	1
PCB-1268	0.11	U	0.41	0.11	ug/L		08/24/18 19:08	08/25/18 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*30 - 150*	*08/24/18 19:08*	*08/25/18 21:58*	*1*
Tetrachloro-m-xylene	*74*		*30 - 150*	*08/24/18 19:08*	*08/25/18 21:58*	*1*
DCB Decachlorobiphenyl	*85*		*30 - 150*	*08/24/18 19:08*	*08/25/18 21:58*	*1*
DCB Decachlorobiphenyl	*85*		*30 - 150*	*08/24/18 19:08*	*08/25/18 21:58*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.66**		0.12	0.078	mg/L			08/26/18 15:12	1
Sulfate	**7.63**		0.60	0.33	mg/L			08/26/18 15:12	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 21:43	2

Client Sample ID: OB-21-082218
Date Collected: 08/22/18 10:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-12
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.77	U	2.0	0.77	ug/L		08/29/18 10:35	08/29/18 21:43	2
Barium	**7.2**		4.0	1.1	ug/L		08/29/18 10:35	08/29/18 21:43	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 21:43	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 21:43	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:43	2
Chromium	**1.4**	**J**	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:43	2
Copper	**9.5**		4.0	1.9	ug/L		08/29/18 10:35	08/29/18 21:43	2
Manganese	**87.9**		8.0	2.7	ug/L		08/29/18 10:35	08/29/18 21:43	2
Nickel	**2.5**	**J**	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:43	2
Lead	**0.70**	**J**	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 21:43	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 21:43	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 21:43	2
Vanadium	**1.2**	**J**	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 21:43	2
Zinc	**7.2**	**J**	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 21:43	2
Aluminum	**649**		40.0	15.0	ug/L		08/29/18 10:35	08/29/18 21:43	2
Sodium	**4060**		200	75.7	ug/L		08/29/18 10:35	08/29/18 21:43	2
Magnesium	**5030**		200	65.7	ug/L		08/29/18 10:35	08/29/18 21:43	2
Potassium	**1120**		200	64.9	ug/L		08/29/18 10:35	08/29/18 21:43	2
Calcium	**10300**		200	67.6	ug/L		08/29/18 10:35	08/29/18 21:43	2
Iron	**1190**		120	45.7	ug/L		08/29/18 10:35	08/29/18 21:43	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 21:43	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 16:18	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 16:18	2
Barium	**3.4**	**J**	4.0	1.1	ug/L		08/27/18 09:32	08/27/18 16:18	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 16:18	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 16:18	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:18	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:18	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 16:18	2
Manganese	2.7	U	8.0	2.7	ug/L		08/27/18 09:32	08/27/18 16:18	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:18	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 16:18	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 16:18	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 16:18	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 16:18	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 16:18	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 16:18	2
Sodium	**3390**		200	75.7	ug/L		08/27/18 09:32	08/27/18 16:18	2
Magnesium	**4550**		200	65.7	ug/L		08/27/18 09:32	08/27/18 16:18	2
Potassium	**994**		200	64.9	ug/L		08/27/18 09:32	08/27/18 16:18	2
Calcium	**11100**		200	67.6	ug/L		08/27/18 09:32	08/27/18 16:18	2
Iron	45.7	U	120	45.7	ug/L		08/27/18 09:32	08/27/18 16:18	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 16:18	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 16:03	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 13:03	1
Bicarbonate Alkalinity as CaCO3	**45.4**		5.0	5.0	mg/L			08/25/18 15:42	1
Alkalinity	**45.4**		5.0	5.0	mg/L			08/25/18 15:42	1

Client Sample ID: OB-27-082218

Lab Sample ID: 460-163188-13

Date Collected: 08/22/18 14:35

Matrix: Water

Date Received: 08/23/18 11:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 12:41	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 12:41	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*70 - 130*		*08/28/18 12:41*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 16:15	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 16:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 16:15	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 16:15	1
1,1-Dichloroethane	**3.1**		1.0	0.26	ug/L			08/27/18 16:15	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 16:15	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 16:15	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 16:15	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 16:15	1
1,2-Dichloroethane	**0.45**	**J**	1.0	0.43	ug/L			08/27/18 16:15	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 16:15	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 16:15	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 16:15	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 16:15	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 16:15	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 16:15	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 16:15	1
Benzene	**3.3**		1.0	0.43	ug/L			08/27/18 16:15	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 16:15	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 16:15	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/27/18 16:15	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 16:15	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 16:15	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 16:15	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 16:15	1
Chloroethane	**180**		1.0	0.32	ug/L			08/27/18 16:15	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 16:15	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 16:15	1
cis-1,2-Dichloroethene	**0.43**	**J**	1.0	0.22	ug/L			08/27/18 16:15	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 16:15	1
Cyclohexane	**1.4**		1.0	0.32	ug/L			08/27/18 16:15	1

Client Sample ID: OB-27-082218
Date Collected: 08/22/18 14:35
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 16:15	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 16:15	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 16:15	1
Isopropylbenzene	**3.2**		1.0	0.34	ug/L			08/27/18 16:15	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 16:15	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 16:15	1
Methylcyclohexane	**0.93**	**J**	1.0	0.26	ug/L			08/27/18 16:15	1
Methylene Chloride	**1.1**		1.0	0.32	ug/L			08/27/18 16:15	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 16:15	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 16:15	1
Toluene	**0.48**	**J**	1.0	0.38	ug/L			08/27/18 16:15	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 16:15	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 16:15	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 16:15	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 16:15	1
Vinyl chloride	**0.29**	**J**	1.0	0.17	ug/L			08/27/18 16:15	1
Xylenes, Total	**7.4**		2.0	0.65	ug/L			08/27/18 16:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Indane	*24*	*J N*	*ug/L*		*11.07*	*496-11-7*		*08/27/18 16:15*	*1*
Benzene, 1-methyl-2-(1-methylethyl)-	*15*	*J N*	*ug/L*		*11.35*	*527-84-4*		*08/27/18 16:15*	*1*
Unknown	*13*	*J*	*ug/L*		*11.43*			*08/27/18 16:15*	*1*
Benzene, 1,2,3,5-tetramethyl-	*21*	*J N*	*ug/L*		*11.61*	*527-53-7*		*08/27/18 16:15*	*1*
Unknown	*9.3*	*J*	*ug/L*		*11.80*			*08/27/18 16:15*	*1*
1H-Indene, 2,3-dihydro-5-methyl-	*46*	*J N*	*ug/L*		*11.90*	*874-35-1*		*08/27/18 16:15*	*1*
Unknown	*16*	*J*	*ug/L*		*12.11*			*08/27/18 16:15*	*1*
1H-Indene, 2,3-dihydro-1,6-dimethyl-	*28*	*J N*	*ug/L*		*12.20*	*17059-48-2*		*08/27/18 16:15*	*1*
Naphthalene	*10*	*J N*	*ug/L*		*12.35*	*91-20-3*		*08/27/18 16:15*	*1*
Unknown	*9.0*	*J*	*ug/L*		*12.42*			*08/27/18 16:15*	*1*
Unknown	*8.9*	*J*	*ug/L*		*12.46*			*08/27/18 16:15*	*1*
Unknown	*12*	*J*	*ug/L*		*12.85*			*08/27/18 16:15*	*1*
Unknown	*13*	*J*	*ug/L*		*12.96*			*08/27/18 16:15*	*1*
Unknown	*9.1*	*J*	*ug/L*		*13.15*			*08/27/18 16:15*	*1*
Unknown	*9.6*	*J*	*ug/L*		*13.33*			*08/27/18 16:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*08/27/18 16:15*	*1*
4-Bromofluorobenzene	*99*		*70 - 130*		*08/27/18 16:15*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/27/18 16:15*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/27/18 16:15*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**17**		0.20	0.016	ug/L		08/25/18 10:18	08/26/18 04:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/25/18 10:18*	*08/26/18 04:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/28/18 20:11	08/29/18 15:11	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-27-082218
Date Collected: 08/22/18 14:35
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/28/18 20:11	08/29/18 15:11	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/28/18 20:11	08/29/18 15:11	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/28/18 20:11	08/29/18 15:11	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/28/18 20:11	08/29/18 15:11	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/28/18 20:11	08/29/18 15:11	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/28/18 20:11	08/29/18 15:11	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/28/18 20:11	08/29/18 15:11	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/28/18 20:11	08/29/18 15:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/28/18 20:11	08/29/18 15:13	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/28/18 20:11	08/29/18 15:13	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/28/18 20:11	08/29/18 15:13	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 15:13	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/28/18 20:11	08/29/18 15:13	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 15:13	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/28/18 20:11	08/29/18 15:13	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/28/18 20:11	08/29/18 15:13	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/28/18 20:11	08/29/18 15:13	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/28/18 20:11	08/29/18 15:13	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/28/18 20:11	08/29/18 15:13	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/28/18 20:11	08/29/18 15:13	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/28/18 20:11	08/29/18 15:13	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/28/18 20:11	08/29/18 15:13	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/28/18 20:11	08/29/18 15:13	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/28/18 20:11	08/29/18 15:13	1
Isophorone	0.80	U	10	0.80	ug/L		08/28/18 20:11	08/29/18 15:13	1
Naphthalene	**3.2**	**J**	10	1.1	ug/L		08/28/18 20:11	08/29/18 15:13	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/28/18 20:11	08/29/18 15:13	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/28/18 20:11	08/29/18 15:13	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 15:13	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/28/18 20:11	08/29/18 15:13	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 15:13	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/28/18 20:11	08/29/18 15:13	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/28/18 20:11	08/29/18 15:13	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/28/18 20:11	08/29/18 15:13	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/28/18 20:11	08/29/18 15:13	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/28/18 20:11	08/29/18 15:13	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 15:13	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 15:13	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/28/18 20:11	08/29/18 15:13	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/28/18 20:11	08/29/18 15:13	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/28/18 20:11	08/29/18 15:13	1
Fluorene	0.91	U	10	0.91	ug/L		08/28/18 20:11	08/29/18 15:13	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/28/18 20:11	08/29/18 15:13	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/28/18 20:11	08/29/18 15:13	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/28/18 20:11	08/29/18 15:13	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/28/18 20:11	08/29/18 15:13	1
Anthracene	0.63	U	10	0.63	ug/L		08/28/18 20:11	08/29/18 15:13	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-27-082218
Date Collected: 08/22/18 14:35
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	0.68	U	10	0.68	ug/L		08/28/18 20:11	08/29/18 15:13	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/28/18 20:11	08/29/18 15:13	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/28/18 20:11	08/29/18 15:13	1
Pyrene	1.6	U	10	1.6	ug/L		08/28/18 20:11	08/29/18 15:13	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/28/18 20:11	08/29/18 15:13	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/28/18 20:11	08/29/18 15:13	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/28/18 20:11	08/29/18 15:13	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/28/18 20:11	08/29/18 15:13	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/28/18 20:11	08/29/18 15:13	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/28/18 20:11	08/29/18 15:13	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 15:13	1
Acetophenone	0.79	U	10	0.79	ug/L		08/28/18 20:11	08/29/18 15:13	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/28/18 20:11	08/29/18 15:13	1
Caprolactam	0.68	U	10	0.68	ug/L		08/28/18 20:11	08/29/18 15:13	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/28/18 20:11	08/29/18 15:13	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/28/18 20:11	08/29/18 15:13	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 15:13	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/28/18 20:11	08/29/18 15:13	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/28/18 20:11	08/29/18 15:13	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 15:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzene, 2-ethenyl-1,4-dimethyl-	*9.0*	*J N*	*ug/L*		*5.44*	*2039-89-6*	*08/28/18 20:11*	*08/29/18 15:13*	*1*
Unknown	*7.3*	*J*	*ug/L*		*6.91*		*08/28/18 20:11*	*08/29/18 15:13*	*1*
Naphthalene, 2,3-dimethyl-	*7.8*	*J N*	*ug/L*		*7.10*	*581-40-8*	*08/28/18 20:11*	*08/29/18 15:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*89*		*30 - 130*	*08/28/18 20:11*	*08/29/18 15:13*	*1*
Phenol-d5 (Surr)	*29*		*15 - 110*	*08/28/18 20:11*	*08/29/18 15:13*	*1*
Terphenyl-d14 (Surr)	*93*		*30 - 130*	*08/28/18 20:11*	*08/29/18 15:13*	*1*
2,4,6-Tribromophenol (Surr)	*92*		*15 - 110*	*08/28/18 20:11*	*08/29/18 15:13*	*1*
2-Fluorophenol (Surr)	*44*		*15 - 110*	*08/28/18 20:11*	*08/29/18 15:13*	*1*
2-Fluorobiphenyl	*90*		*30 - 130*	*08/28/18 20:11*	*08/29/18 15:13*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:14	1
PCB-1016	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:14	1
PCB-1221	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:14	1
PCB-1232	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:14	1
PCB-1242	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:14	1
PCB-1248	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:14	1
PCB-1254	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 22:14	1
PCB-1260	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 22:14	1
PCB-1262	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 22:14	1
PCB-1268	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*30 - 150*	*08/24/18 19:08*	*08/25/18 22:14*	*1*
Tetrachloro-m-xylene	*96*		*30 - 150*	*08/24/18 19:08*	*08/25/18 22:14*	*1*

Client Sample ID: OB-27-082218
Date Collected: 08/22/18 14:35
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-13
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*108*		*30 - 150*	*08/24/18 19:08*	*08/25/18 22:14*	*1*
DCB Decachlorobiphenyl	*107*		*30 - 150*	*08/24/18 19:08*	*08/25/18 22:14*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.04**		0.12	0.078	mg/L			08/26/18 16:04	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/26/18 16:04	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 21:46	2
Arsenic	**25.4**		2.0	0.77	ug/L		08/29/18 10:35	08/29/18 21:46	2
Barium	**68.2**		4.0	1.1	ug/L		08/29/18 10:35	08/29/18 21:46	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 21:46	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 21:46	2
Cobalt	**4.4**		4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:46	2
Chromium	**1.4**	**J**	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:46	2
Copper	**3.6**	**J**	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 21:46	2
Manganese	**6350**		8.0	2.7	ug/L		08/29/18 10:35	08/29/18 21:46	2
Nickel	**3.4**	**J**	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:46	2
Lead	**1.1**	**J**	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 21:46	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 21:46	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 21:46	2
Vanadium	**1.6**	**J**	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 21:46	2
Zinc	**9.2**	**J**	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 21:46	2
Aluminum	**594**		40.0	15.0	ug/L		08/29/18 10:35	08/29/18 21:46	2
Sodium	**3660**		200	75.7	ug/L		08/29/18 10:35	08/29/18 21:46	2
Magnesium	**4820**		200	65.7	ug/L		08/29/18 10:35	08/29/18 21:46	2
Potassium	**1870**		200	64.9	ug/L		08/29/18 10:35	08/29/18 21:46	2
Calcium	**33300**		200	67.6	ug/L		08/29/18 10:35	08/29/18 21:46	2
Iron	**52300**		120	45.7	ug/L		08/29/18 10:35	08/29/18 21:46	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 21:46	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 16:38	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 16:38	2
Barium	**46.7**		4.0	1.1	ug/L		08/27/18 09:32	08/27/18 16:38	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 16:38	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 16:38	2
Cobalt	**3.3**	**J**	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:38	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:38	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 16:38	2
Manganese	**6740**		8.0	2.7	ug/L		08/27/18 09:32	08/27/18 16:38	2
Nickel	**1.4**	**J**	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:38	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 16:38	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 16:38	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 16:38	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 16:38	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 16:38	2

Client Sample ID: OB-27-082218

Lab Sample ID: 460-163188-13

Date Collected: 08/22/18 14:35

Matrix: Water

Date Received: 08/23/18 11:25

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 16:38	2
Sodium	**2930**		200	75.7	ug/L		08/27/18 09:32	08/27/18 16:38	2
Magnesium	**4230**		200	65.7	ug/L		08/27/18 09:32	08/27/18 16:38	2
Potassium	**1840**		200	64.9	ug/L		08/27/18 09:32	08/27/18 16:38	2
Calcium	**34800**		200	67.6	ug/L		08/27/18 09:32	08/27/18 16:38	2
Iron	**6620**		120	45.7	ug/L		08/27/18 09:32	08/27/18 16:38	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 16:38	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 16:05	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.0056**	**J**	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 13:03	1
Bicarbonate Alkalinity as CaCO3	**159**		5.0	5.0	mg/L			08/25/18 15:48	1
Alkalinity	**159**		5.0	5.0	mg/L			08/25/18 15:48	1

Client Sample ID: OB-30B-082218

Lab Sample ID: 460-163188-14

Date Collected: 08/22/18 15:55

Matrix: Water

Date Received: 08/23/18 11:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 13:05	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 13:05	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*70 - 130*		*08/28/18 13:05*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/28/18 20:49	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/28/18 20:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/28/18 20:49	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/28/18 20:49	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/28/18 20:49	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/28/18 20:49	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/28/18 20:49	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/28/18 20:49	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/28/18 20:49	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/28/18 20:49	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/28/18 20:49	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/28/18 20:49	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/28/18 20:49	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/28/18 20:49	1

Client Sample ID: OB-30B-082218
Date Collected: 08/22/18 15:55
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/28/18 20:49	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/28/18 20:49	1
Acetone	5.0	U	5.0	5.0	ug/L			08/28/18 20:49	1
Benzene	0.43	U	1.0	0.43	ug/L			08/28/18 20:49	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/28/18 20:49	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/28/18 20:49	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/28/18 20:49	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/28/18 20:49	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/28/18 20:49	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/28/18 20:49	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/28/18 20:49	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/28/18 20:49	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/28/18 20:49	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/28/18 20:49	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/28/18 20:49	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/28/18 20:49	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/28/18 20:49	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/28/18 20:49	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/28/18 20:49	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/28/18 20:49	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/28/18 20:49	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/28/18 20:49	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/28/18 20:49	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/28/18 20:49	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/28/18 20:49	1
Styrene	0.42	U	1.0	0.42	ug/L			08/28/18 20:49	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/28/18 20:49	1
Toluene	0.38	U	1.0	0.38	ug/L			08/28/18 20:49	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/28/18 20:49	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/28/18 20:49	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/28/18 20:49	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/28/18 20:49	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/28/18 20:49	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/28/18 20:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/28/18 20:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*08/28/18 20:49*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*08/28/18 20:49*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/28/18 20:49*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/28/18 20:49*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/25/18 10:18	08/26/18 04:25	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/25/18 10:18*	*08/26/18 04:25*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-30B-082218
Date Collected: 08/22/18 15:55
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.052	0.016	ug/L		08/28/18 20:11	08/29/18 15:32	1
Benzo[a]pyrene	0.023	U	0.052	0.023	ug/L		08/28/18 20:11	08/29/18 15:32	1
Benzo[b]fluoranthene	0.025	U	0.052	0.025	ug/L		08/28/18 20:11	08/29/18 15:32	1
Bis(2-chloroethyl)ether	0.027	U	0.031	0.027	ug/L		08/28/18 20:11	08/29/18 15:32	1
Dibenz(a,h)anthracene	0.012	U *	0.052	0.012	ug/L		08/28/18 20:11	08/29/18 15:32	1
Hexachlorobenzene	0.014	U	0.021	0.014	ug/L		08/28/18 20:11	08/29/18 15:32	1
Indeno[1,2,3-cd]pyrene	0.038	U	0.052	0.038	ug/L		08/28/18 20:11	08/29/18 15:32	1
N-Nitrosodimethylamine	0.12	U	0.21	0.12	ug/L		08/28/18 20:11	08/29/18 15:32	1
Pentachlorophenol	0.16	U	0.21	0.16	ug/L		08/28/18 20:11	08/29/18 15:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.30	U	10	0.30	ug/L		08/28/18 20:11	08/29/18 15:34	1
2-Chlorophenol	0.39	U	10	0.39	ug/L		08/28/18 20:11	08/29/18 15:34	1
2-Methylphenol	0.27	U	10	0.27	ug/L		08/28/18 20:11	08/29/18 15:34	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 15:34	1
2-Nitrophenol	0.78	U	10	0.78	ug/L		08/28/18 20:11	08/29/18 15:34	1
2,4-Dimethylphenol	0.25	U	10	0.25	ug/L		08/28/18 20:11	08/29/18 15:34	1
2,4-Dichlorophenol	0.44	U	10	0.44	ug/L		08/28/18 20:11	08/29/18 15:34	1
4-Chloro-3-methylphenol	0.60	U	10	0.60	ug/L		08/28/18 20:11	08/29/18 15:34	1
2,4,6-Trichlorophenol	0.31	U	10	0.31	ug/L		08/28/18 20:11	08/29/18 15:34	1
2,4,5-Trichlorophenol	0.29	U	10	0.29	ug/L		08/28/18 20:11	08/29/18 15:34	1
2,4-Dinitrotoluene	1.0	U	2.1	1.0	ug/L		08/28/18 20:11	08/29/18 15:34	1
4-Nitrophenol	0.72	U	21	0.72	ug/L		08/28/18 20:11	08/29/18 15:34	1
4,6-Dinitro-2-methylphenol	14	U	21	14	ug/L		08/28/18 20:11	08/29/18 15:34	1
N-Nitrosodi-n-propylamine	0.45	U	1.0	0.45	ug/L		08/28/18 20:11	08/29/18 15:34	1
Hexachloroethane	1.2	U	2.1	1.2	ug/L		08/28/18 20:11	08/29/18 15:34	1
Nitrobenzene	0.59	U	1.0	0.59	ug/L		08/28/18 20:11	08/29/18 15:34	1
Isophorone	0.83	U	10	0.83	ug/L		08/28/18 20:11	08/29/18 15:34	1
Naphthalene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 15:34	1
4-Chloroaniline	2.0	U	10	2.0	ug/L		08/28/18 20:11	08/29/18 15:34	1
Hexachlorobutadiene	0.81	U	1.0	0.81	ug/L		08/28/18 20:11	08/29/18 15:34	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 15:34	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/28/18 20:11	08/29/18 15:34	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 15:34	1
2-Nitroaniline	0.49	U	10	0.49	ug/L		08/28/18 20:11	08/29/18 15:34	1
Dimethyl phthalate	0.80	U	10	0.80	ug/L		08/28/18 20:11	08/29/18 15:34	1
Acenaphthylene	0.86	U	10	0.86	ug/L		08/28/18 20:11	08/29/18 15:34	1
2,6-Dinitrotoluene	0.41	U	2.1	0.41	ug/L		08/28/18 20:11	08/29/18 15:34	1
3-Nitroaniline	1.0	U	10	1.0	ug/L		08/28/18 20:11	08/29/18 15:34	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 15:34	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 15:34	1
2,4-Dinitrophenol	15	U	21	15	ug/L		08/28/18 20:11	08/29/18 15:34	1
Diethyl phthalate	1.0	U	10	1.0	ug/L		08/28/18 20:11	08/29/18 15:34	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/28/18 20:11	08/29/18 15:34	1
Fluorene	0.95	U	10	0.95	ug/L		08/28/18 20:11	08/29/18 15:34	1
4-Nitroaniline	0.57	U	10	0.57	ug/L		08/28/18 20:11	08/29/18 15:34	1
N-Nitrosodiphenylamine	0.93	U	10	0.93	ug/L		08/28/18 20:11	08/29/18 15:34	1
4-Bromophenyl phenyl ether	0.78	U	10	0.78	ug/L		08/28/18 20:11	08/29/18 15:34	1
Phenanthrene	0.60	U	10	0.60	ug/L		08/28/18 20:11	08/29/18 15:34	1

Client Sample ID: OB-30B-082218
Date Collected: 08/22/18 15:55
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.66	U	10	0.66	ug/L		08/28/18 20:11	08/29/18 15:34	1
Carbazole	0.71	U	10	0.71	ug/L		08/28/18 20:11	08/29/18 15:34	1
Di-n-butyl phthalate	0.88	U	10	0.88	ug/L		08/28/18 20:11	08/29/18 15:34	1
Fluoranthene	0.88	U	10	0.88	ug/L		08/28/18 20:11	08/29/18 15:34	1
Pyrene	1.7	U	10	1.7	ug/L		08/28/18 20:11	08/29/18 15:34	1
Butyl benzyl phthalate	0.89	U	10	0.89	ug/L		08/28/18 20:11	08/29/18 15:34	1
Chrysene	0.94	U	2.1	0.94	ug/L		08/28/18 20:11	08/29/18 15:34	1
Bis(2-ethylhexyl) phthalate	1.8	U	2.1	1.8	ug/L		08/28/18 20:11	08/29/18 15:34	1
Di-n-octyl phthalate	5.0	U	10	5.0	ug/L		08/28/18 20:11	08/29/18 15:34	1
Benzo[k]fluoranthene	0.70	U	1.0	0.70	ug/L		08/28/18 20:11	08/29/18 15:34	1
Benzo[g,h,i]perylene	1.5	U	10	1.5	ug/L		08/28/18 20:11	08/29/18 15:34	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 15:34	1
Acetophenone	0.82	U	10	0.82	ug/L		08/28/18 20:11	08/29/18 15:34	1
Benzaldehyde	0.62	U	10	0.62	ug/L		08/28/18 20:11	08/29/18 15:34	1
Caprolactam	0.71	U	10	0.71	ug/L		08/28/18 20:11	08/29/18 15:34	1
Atrazine	1.4	U	2.1	1.4	ug/L		08/28/18 20:11	08/29/18 15:34	1
2,2'-oxybis[1-chloropropane]	0.66	U	10	0.66	ug/L		08/28/18 20:11	08/29/18 15:34	1
1,2,4,5-Tetrachlorobenzene	1.3	U	10	1.3	ug/L		08/28/18 20:11	08/29/18 15:34	1
2,3,4,6-Tetrachlorophenol	0.78	U	10	0.78	ug/L		08/28/18 20:11	08/29/18 15:34	1
3,3'-Dichlorobenzidine	1.5	U	10	1.5	ug/L		08/28/18 20:11	08/29/18 15:34	1
Bis(2-chloroethoxy)methane	0.25	U	10	0.25	ug/L		08/28/18 20:11	08/29/18 15:34	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/28/18 20:11*	*08/29/18 15:34*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*109*		*30 - 130*	*08/28/18 20:11*	*08/29/18 15:34*	*1*
Phenol-d5 (Surr)	*36*		*15 - 110*	*08/28/18 20:11*	*08/29/18 15:34*	*1*
Terphenyl-d14 (Surr)	*110*		*30 - 130*	*08/28/18 20:11*	*08/29/18 15:34*	*1*
2,4,6-Tribromophenol (Surr)	*114*	*X*	*15 - 110*	*08/28/18 20:11*	*08/29/18 15:34*	*1*
2-Fluorophenol (Surr)	*54*		*15 - 110*	*08/28/18 20:11*	*08/29/18 15:34*	*1*
2-Fluorobiphenyl	*108*		*30 - 130*	*08/28/18 20:11*	*08/29/18 15:34*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:30	1
PCB-1016	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:30	1
PCB-1221	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:30	1
PCB-1232	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:30	1
PCB-1242	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:30	1
PCB-1248	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:30	1
PCB-1254	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 22:30	1
PCB-1260	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 22:30	1
PCB-1262	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 22:30	1
PCB-1268	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*30 - 150*	*08/24/18 19:08*	*08/25/18 22:30*	*1*
Tetrachloro-m-xylene	*75*		*30 - 150*	*08/24/18 19:08*	*08/25/18 22:30*	*1*
DCB Decachlorobiphenyl	*87*		*30 - 150*	*08/24/18 19:08*	*08/25/18 22:30*	*1*

Client Sample ID: OB-30B-082218

Date Collected: 08/22/18 15:55
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-14

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*30 - 150*	*08/24/18 19:08*	*08/25/18 22:30*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**14.7**		0.60	0.33	mg/L			08/26/18 17:35	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.1**	**D**	0.96	0.62	mg/L			08/27/18 10:20	8

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 21:59	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/29/18 10:35	08/29/18 21:59	2
Barium	**24.1**		4.0	1.1	ug/L		08/29/18 10:35	08/29/18 21:59	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 21:59	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 21:59	2
Cobalt	**1.7**	**J**	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:59	2
Chromium	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:59	2
Copper	**2.8**	**J**	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 21:59	2
Manganese	**1220**		8.0	2.7	ug/L		08/29/18 10:35	08/29/18 21:59	2
Nickel	**2.9**	**J**	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:59	2
Lead	0.37	U	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 21:59	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 21:59	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 21:59	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 21:59	2
Zinc	5.4	U	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 21:59	2
Aluminum	**40.3**		40.0	15.0	ug/L		08/29/18 10:35	08/29/18 21:59	2
Sodium	**23100**		200	75.7	ug/L		08/29/18 10:35	08/29/18 21:59	2
Magnesium	**4800**		200	65.7	ug/L		08/29/18 10:35	08/29/18 21:59	2
Potassium	**2780**		200	64.9	ug/L		08/29/18 10:35	08/29/18 21:59	2
Calcium	**18800**		200	67.6	ug/L		08/29/18 10:35	08/29/18 21:59	2
Iron	**59.6**	**J**	120	45.7	ug/L		08/29/18 10:35	08/29/18 21:59	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 21:59	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 16:25	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 16:25	2
Barium	**24.9**		4.0	1.1	ug/L		08/27/18 09:32	08/27/18 16:25	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 16:25	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 16:25	2
Cobalt	**1.3**	**J**	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:25	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:25	2
Copper	**2.0**	**J**	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 16:25	2
Manganese	**1180**		8.0	2.7	ug/L		08/27/18 09:32	08/27/18 16:25	2
Nickel	**2.1**	**J**	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:25	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 16:25	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 16:25	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 16:25	2

Client Sample ID: OB-30B-082218

Lab Sample ID: 460-163188-14

Date Collected: 08/22/18 15:55

Matrix: Water

Date Received: 08/23/18 11:25

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 16:25	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 16:25	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 16:25	2
Sodium	**20900**		200	75.7	ug/L		08/27/18 09:32	08/27/18 16:25	2
Magnesium	**4310**		200	65.7	ug/L		08/27/18 09:32	08/27/18 16:25	2
Potassium	**2800**		200	64.9	ug/L		08/27/18 09:32	08/27/18 16:25	2
Calcium	**19700**		200	67.6	ug/L		08/27/18 09:32	08/27/18 16:25	2
Iron	45.7	U	120	45.7	ug/L		08/27/18 09:32	08/27/18 16:25	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 16:25	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 16:25	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.0022**	**J**	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 13:04	1
Bicarbonate Alkalinity as CaCO3	**73.9**		5.0	5.0	mg/L			08/25/18 15:55	1
Alkalinity	**73.9**		5.0	5.0	mg/L			08/25/18 15:55	1

Client Sample ID: OB-31-082218

Lab Sample ID: 460-163188-15

Date Collected: 08/22/18 12:20

Matrix: Water

Date Received: 08/23/18 11:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 13:28	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 13:28	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*70 - 130*		*08/28/18 13:28*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 17:02	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 17:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 17:02	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 17:02	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 17:02	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 17:02	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 17:02	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 17:02	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 17:02	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 17:02	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 17:02	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 17:02	1

Client Sample ID: OB-31-082218
Date Collected: 08/22/18 12:20
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 17:02	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 17:02	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 17:02	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 17:02	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 17:02	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 17:02	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 17:02	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 17:02	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/27/18 17:02	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 17:02	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 17:02	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 17:02	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 17:02	1
Chloroethane	**6.4**		1.0	0.32	ug/L			08/27/18 17:02	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 17:02	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 17:02	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 17:02	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 17:02	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 17:02	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 17:02	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 17:02	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 17:02	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 17:02	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 17:02	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 17:02	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 17:02	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 17:02	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 17:02	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 17:02	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 17:02	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 17:02	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 17:02	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 17:02	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 17:02	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 17:02	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 17:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1H-Indene, 2,3-dihydro-1,3-dimethyl-	*9.6*	*J N*	*ug/L*		*12.19*	*4175-53-5*		*08/27/18 17:02*	*1*
Unknown	*6.1*	*J*	*ug/L*		*12.46*			*08/27/18 17:02*	*1*
Unknown	*8.7*	*J*	*ug/L*		*12.82*			*08/27/18 17:02*	*1*
Unknown	*7.8*	*J*	*ug/L*		*12.94*			*08/27/18 17:02*	*1*
Unknown	*5.2*	*J*	*ug/L*		*13.29*			*08/27/18 17:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*		*08/27/18 17:02*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*08/27/18 17:02*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*08/27/18 17:02*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/27/18 17:02*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-31-082218
Date Collected: 08/22/18 12:20
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-15
Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.1		0.20	0.016	ug/L		08/25/18 10:18	08/26/18 04:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/25/18 10:18*	*08/26/18 04:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:05	08/26/18 23:05	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:05	08/26/18 23:05	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:05	08/26/18 23:05	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:05	08/26/18 23:05	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:05	08/26/18 23:05	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 10:05	08/26/18 23:05	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:05	08/26/18 23:05	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:05	08/26/18 23:05	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:05	08/26/18 23:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:05	08/26/18 22:10	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:05	08/26/18 22:10	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:05	08/26/18 22:10	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 22:10	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 22:10	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 22:10	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:05	08/26/18 22:10	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 22:10	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:05	08/26/18 22:10	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:05	08/26/18 22:10	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:05	08/26/18 22:10	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:05	08/26/18 22:10	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:05	08/26/18 22:10	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:05	08/26/18 22:10	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:05	08/26/18 22:10	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:05	08/26/18 22:10	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:05	08/26/18 22:10	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 22:10	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:05	08/26/18 22:10	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:05	08/26/18 22:10	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 22:10	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:05	08/26/18 22:10	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 22:10	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:05	08/26/18 22:10	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:05	08/26/18 22:10	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:05	08/26/18 22:10	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:05	08/26/18 22:10	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:05	08/26/18 22:10	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 22:10	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 22:10	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:05	08/26/18 22:10	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:05	08/26/18 22:10	1

Client Sample ID: OB-31-082218
Date Collected: 08/22/18 12:20
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 22:10	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:05	08/26/18 22:10	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:05	08/26/18 22:10	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:05	08/26/18 22:10	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 22:10	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 22:10	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 22:10	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:05	08/26/18 22:10	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 22:10	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 22:10	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:05	08/26/18 22:10	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:05	08/26/18 22:10	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:05	08/26/18 22:10	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:05	08/26/18 22:10	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:05	08/26/18 22:10	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:05	08/26/18 22:10	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 22:10	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 22:10	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:05	08/26/18 22:10	1
Benzaldehyde	0.59	U *	10	0.59	ug/L		08/25/18 10:05	08/26/18 22:10	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:05	08/26/18 22:10	1
Atrazine	1.3	U *	2.0	1.3	ug/L		08/25/18 10:05	08/26/18 22:10	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 22:10	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 22:10	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 22:10	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 22:10	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 22:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:05*	*08/26/18 22:10*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*102*		*30 - 130*	*08/25/18 10:05*	*08/26/18 22:10*	*1*
Phenol-d5 (Surr)	*23*		*15 - 110*	*08/25/18 10:05*	*08/26/18 22:10*	*1*
Terphenyl-d14 (Surr)	*98*		*30 - 130*	*08/25/18 10:05*	*08/26/18 22:10*	*1*
2,4,6-Tribromophenol (Surr)	*102*		*15 - 110*	*08/25/18 10:05*	*08/26/18 22:10*	*1*
2-Fluorophenol (Surr)	*39*		*15 - 110*	*08/25/18 10:05*	*08/26/18 22:10*	*1*
2-Fluorobiphenyl	*83*		*30 - 130*	*08/25/18 10:05*	*08/26/18 22:10*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:46	1
PCB-1016	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:46	1
PCB-1221	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:46	1
PCB-1232	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:46	1
PCB-1242	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:46	1
PCB-1248	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 22:46	1
PCB-1254	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 22:46	1
PCB-1260	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 22:46	1
PCB-1262	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 22:46	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: OB-31-082218
Date Collected: 08/22/18 12:20
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-15
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*30 - 150*	*08/24/18 19:08*	*08/25/18 22:46*	*1*
Tetrachloro-m-xylene	*72*		*30 - 150*	*08/24/18 19:08*	*08/25/18 22:46*	*1*
DCB Decachlorobiphenyl	*86*		*30 - 150*	*08/24/18 19:08*	*08/25/18 22:46*	*1*
DCB Decachlorobiphenyl	*83*		*30 - 150*	*08/24/18 19:08*	*08/25/18 22:46*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.60**		0.12	0.078	mg/L			08/26/18 17:48	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/26/18 17:48	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 22:02	2
Arsenic	**15.0**		2.0	0.77	ug/L		08/29/18 10:35	08/29/18 22:02	2
Barium	**36.8**		4.0	1.1	ug/L		08/29/18 10:35	08/29/18 22:02	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 22:02	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 22:02	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 22:02	2
Chromium	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 22:02	2
Copper	1.9	U	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 22:02	2
Manganese	**4680**		8.0	2.7	ug/L		08/29/18 10:35	08/29/18 22:02	2
Nickel	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 22:02	2
Lead	0.37	U	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 22:02	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 22:02	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 22:02	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 22:02	2
Zinc	5.4	U	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 22:02	2
Aluminum	**37.3**	**J**	40.0	15.0	ug/L		08/29/18 10:35	08/29/18 22:02	2
Sodium	**3510**		200	75.7	ug/L		08/29/18 10:35	08/29/18 22:02	2
Magnesium	**3790**		200	65.7	ug/L		08/29/18 10:35	08/29/18 22:02	2
Potassium	**1290**		200	64.9	ug/L		08/29/18 10:35	08/29/18 22:02	2
Calcium	**21400**		200	67.6	ug/L		08/29/18 10:35	08/29/18 22:02	2
Iron	**41300**		120	45.7	ug/L		08/29/18 10:35	08/29/18 22:02	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 22:02	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 16:42	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 16:42	2
Barium	**26.3**		4.0	1.1	ug/L		08/27/18 09:32	08/27/18 16:42	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 16:42	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 16:42	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:42	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:42	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 16:42	2
Manganese	**4660**		8.0	2.7	ug/L		08/27/18 09:32	08/27/18 16:42	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:42	2

Client Sample ID: OB-31-082218

Lab Sample ID: 460-163188-15

Date Collected: 08/22/18 12:20

Matrix: Water

Date Received: 08/23/18 11:25

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 16:42	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 16:42	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 16:42	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 16:42	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 16:42	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 16:42	2
Sodium	**2780**		200	75.7	ug/L		08/27/18 09:32	08/27/18 16:42	2
Magnesium	**3250**		200	65.7	ug/L		08/27/18 09:32	08/27/18 16:42	2
Potassium	**1250**		200	64.9	ug/L		08/27/18 09:32	08/27/18 16:42	2
Calcium	**20900**		200	67.6	ug/L		08/27/18 09:32	08/27/18 16:42	2
Iron	**2260**		120	45.7	ug/L		08/27/18 09:32	08/27/18 16:42	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 16:42	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 16:27	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.0049**	**J**	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 13:05	1
Bicarbonate Alkalinity as CaCO3	**91.7**		5.0	5.0	mg/L			08/25/18 16:02	1
Alkalinity	**91.7**		5.0	5.0	mg/L			08/25/18 16:02	1

Client Sample ID: RW-7-082218

Lab Sample ID: 460-163188-16

Date Collected: 08/22/18 10:25

Matrix: Water

Date Received: 08/23/18 11:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 13:52	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 13:52	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*70 - 130*		*08/28/18 13:52*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 17:26	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 17:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 17:26	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 17:26	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 17:26	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 17:26	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 17:26	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 17:26	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 17:26	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: RW-7-082218
Date Collected: 08/22/18 10:25
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 17:26	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 17:26	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 17:26	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 17:26	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 17:26	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 17:26	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 17:26	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 17:26	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 17:26	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 17:26	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 17:26	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/27/18 17:26	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 17:26	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 17:26	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 17:26	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 17:26	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 17:26	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 17:26	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 17:26	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 17:26	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 17:26	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 17:26	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 17:26	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 17:26	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 17:26	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 17:26	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 17:26	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 17:26	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 17:26	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 17:26	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 17:26	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 17:26	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 17:26	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 17:26	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 17:26	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 17:26	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 17:26	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 17:26	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 17:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 17:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*08/27/18 17:26*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*08/27/18 17:26*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*08/27/18 17:26*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/27/18 17:26*	*1*

Client Sample ID: RW-7-082218
Date Collected: 08/22/18 10:25
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-16
Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/25/18 10:18	08/26/18 05:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/25/18 10:18*	*08/26/18 05:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:05	08/26/18 23:27	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:05	08/26/18 23:27	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:05	08/26/18 23:27	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:05	08/26/18 23:27	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:05	08/26/18 23:27	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 10:05	08/26/18 23:27	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:05	08/26/18 23:27	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:05	08/26/18 23:27	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:05	08/26/18 23:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:05	08/26/18 22:31	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:05	08/26/18 22:31	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:05	08/26/18 22:31	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 22:31	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 22:31	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 22:31	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:05	08/26/18 22:31	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 22:31	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:05	08/26/18 22:31	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:05	08/26/18 22:31	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:05	08/26/18 22:31	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:05	08/26/18 22:31	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:05	08/26/18 22:31	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:05	08/26/18 22:31	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:05	08/26/18 22:31	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:05	08/26/18 22:31	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:05	08/26/18 22:31	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 22:31	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:05	08/26/18 22:31	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:05	08/26/18 22:31	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 22:31	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:05	08/26/18 22:31	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 22:31	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:05	08/26/18 22:31	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:05	08/26/18 22:31	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:05	08/26/18 22:31	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:05	08/26/18 22:31	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:05	08/26/18 22:31	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 22:31	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 22:31	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:05	08/26/18 22:31	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:05	08/26/18 22:31	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: RW-7-082218
Date Collected: 08/22/18 10:25
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 22:31	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:05	08/26/18 22:31	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:05	08/26/18 22:31	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:05	08/26/18 22:31	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 22:31	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 22:31	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 22:31	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:05	08/26/18 22:31	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 22:31	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 22:31	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:05	08/26/18 22:31	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:05	08/26/18 22:31	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:05	08/26/18 22:31	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:05	08/26/18 22:31	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:05	08/26/18 22:31	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:05	08/26/18 22:31	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 22:31	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 22:31	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:05	08/26/18 22:31	1
Benzaldehyde	0.59	U *	10	0.59	ug/L		08/25/18 10:05	08/26/18 22:31	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:05	08/26/18 22:31	1
Atrazine	1.3	U *	2.0	1.3	ug/L		08/25/18 10:05	08/26/18 22:31	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 22:31	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 22:31	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 22:31	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 22:31	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 22:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:05*	*08/26/18 22:31*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*86*		*30 - 130*	*08/25/18 10:05*	*08/26/18 22:31*	*1*
Phenol-d5 (Surr)	*22*		*15 - 110*	*08/25/18 10:05*	*08/26/18 22:31*	*1*
Terphenyl-d14 (Surr)	*83*		*30 - 130*	*08/25/18 10:05*	*08/26/18 22:31*	*1*
2,4,6-Tribromophenol (Surr)	*88*		*15 - 110*	*08/25/18 10:05*	*08/26/18 22:31*	*1*
2-Fluorophenol (Surr)	*34*		*15 - 110*	*08/25/18 10:05*	*08/26/18 22:31*	*1*
2-Fluorobiphenyl	*75*		*30 - 130*	*08/25/18 10:05*	*08/26/18 22:31*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 23:02	1
PCB-1016	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 23:02	1
PCB-1221	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 23:02	1
PCB-1232	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 23:02	1
PCB-1242	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 23:02	1
PCB-1248	0.12	U	0.42	0.12	ug/L		08/24/18 19:08	08/25/18 23:02	1
PCB-1254	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 23:02	1
PCB-1260	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 23:02	1
PCB-1262	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 23:02	1

Client Sample ID: RW-7-082218

Date Collected: 08/22/18 10:25
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-16

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	0.11	U	0.42	0.11	ug/L		08/24/18 19:08	08/25/18 23:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*30 - 150*	*08/24/18 19:08*	*08/25/18 23:02*	*1*
Tetrachloro-m-xylene	*71*		*30 - 150*	*08/24/18 19:08*	*08/25/18 23:02*	*1*
DCB Decachlorobiphenyl	*83*		*30 - 150*	*08/24/18 19:08*	*08/25/18 23:02*	*1*
DCB Decachlorobiphenyl	*80*		*30 - 150*	*08/24/18 19:08*	*08/25/18 23:02*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.79**		0.12	0.078	mg/L			08/26/18 18:01	1
Sulfate	**8.93**		0.60	0.33	mg/L			08/26/18 18:01	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 22:18	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/29/18 10:35	08/29/18 22:18	2
Barium	**2.3**	**J**	4.0	1.1	ug/L		08/29/18 10:35	08/29/18 22:18	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 22:18	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 22:18	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 22:18	2
Chromium	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 22:18	2
Copper	**2.4**	**J**	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 22:18	2
Manganese	**6.5**	**J**	8.0	2.7	ug/L		08/29/18 10:35	08/29/18 22:18	2
Nickel	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 22:18	2
Lead	**0.38**	**J**	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 22:18	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 22:18	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 22:18	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 22:18	2
Zinc	**7.2**	**J**	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 22:18	2
Aluminum	**224**		40.0	15.0	ug/L		08/29/18 10:35	08/29/18 22:18	2
Sodium	**4160**		200	75.7	ug/L		08/29/18 10:35	08/29/18 22:18	2
Magnesium	**4230**		200	65.7	ug/L		08/29/18 10:35	08/29/18 22:18	2
Potassium	**967**		200	64.9	ug/L		08/29/18 10:35	08/29/18 22:18	2
Calcium	**10600**		200	67.6	ug/L		08/29/18 10:35	08/29/18 22:18	2
Iron	**611**		120	45.7	ug/L		08/29/18 10:35	08/29/18 22:18	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 22:18	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 16:45	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 16:45	2
Barium	**1.6**	**J**	4.0	1.1	ug/L		08/27/18 09:32	08/27/18 16:45	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 16:45	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 16:45	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:45	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:45	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 16:45	2
Manganese	2.7	U	8.0	2.7	ug/L		08/27/18 09:32	08/27/18 16:45	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:45	2

Client Sample ID: RW-7-082218
Lab Sample ID: 460-163188-16
Date Collected: 08/22/18 10:25
Matrix: Water
Date Received: 08/23/18 11:25

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 16:45	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 16:45	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 16:45	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 16:45	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 16:45	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 16:45	2
Sodium	**3430**		200	75.7	ug/L		08/27/18 09:32	08/27/18 16:45	2
Magnesium	**3860**		200	65.7	ug/L		08/27/18 09:32	08/27/18 16:45	2
Potassium	**946**		200	64.9	ug/L		08/27/18 09:32	08/27/18 16:45	2
Calcium	**11300**		200	67.6	ug/L		08/27/18 09:32	08/27/18 16:45	2
Iron	45.7	U	120	45.7	ug/L		08/27/18 09:32	08/27/18 16:45	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 16:45	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 16:29	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:43	1
Bicarbonate Alkalinity as CaCO3	**42.3**		5.0	5.0	mg/L			08/25/18 16:09	1
Alkalinity	**42.3**		5.0	5.0	mg/L			08/25/18 16:09	1

Client Sample ID: TB-02-082318
Lab Sample ID: 460-163188-17
Date Collected: 08/23/18 00:00
Matrix: Water
Date Received: 08/23/18 11:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/29/18 16:34	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/29/18 16:34	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/29/18 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*70 - 130*		*08/29/18 16:34*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 11:33	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 11:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 11:33	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 11:33	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 11:33	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 11:33	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 11:33	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 11:33	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 11:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: TB-02-082318
Date Collected: 08/23/18 00:00
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 11:33	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 11:33	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 11:33	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 11:33	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 11:33	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 11:33	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 11:33	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 11:33	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 11:33	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 11:33	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 11:33	1
Carbon disulfide	**0.54**	**J**	1.0	0.16	ug/L			08/27/18 11:33	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 11:33	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 11:33	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 11:33	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 11:33	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 11:33	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 11:33	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 11:33	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 11:33	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 11:33	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 11:33	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 11:33	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 11:33	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 11:33	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 11:33	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 11:33	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 11:33	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 11:33	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 11:33	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 11:33	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 11:33	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 11:33	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 11:33	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 11:33	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 11:33	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 11:33	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 11:33	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 11:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 11:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*08/27/18 11:33*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*08/27/18 11:33*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*08/27/18 11:33*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/27/18 11:33*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: FB-03-082318
Date Collected: 08/23/18 08:00
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 14:15	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 14:15	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*70 - 130*		*08/28/18 14:15*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 11:56	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 11:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 11:56	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 11:56	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 11:56	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 11:56	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 11:56	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 11:56	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 11:56	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 11:56	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 11:56	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 11:56	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 11:56	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 11:56	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 11:56	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 11:56	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 11:56	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 11:56	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 11:56	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 11:56	1
Carbon disulfide	**0.51**	**J**	1.0	0.16	ug/L			08/27/18 11:56	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 11:56	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 11:56	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 11:56	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 11:56	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 11:56	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 11:56	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 11:56	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 11:56	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 11:56	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 11:56	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 11:56	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 11:56	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 11:56	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 11:56	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 11:56	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 11:56	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 11:56	1
Methylene Chloride	**1.5**		1.0	0.32	ug/L			08/27/18 11:56	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 11:56	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 11:56	1

Client Sample ID: FB-03-082318
Date Collected: 08/23/18 08:00
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 11:56	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 11:56	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 11:56	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 11:56	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 11:56	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 11:56	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 11:56	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/18 11:56*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/27/18 11:56*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*08/27/18 11:56*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*08/27/18 11:56*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/27/18 11:56*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/25/18 10:18	08/26/18 05:18	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*10 - 150*	*08/25/18 10:18*	*08/26/18 05:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:05	08/26/18 23:48	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:05	08/26/18 23:48	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:05	08/26/18 23:48	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:05	08/26/18 23:48	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:05	08/26/18 23:48	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 10:05	08/26/18 23:48	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:05	08/26/18 23:48	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:05	08/26/18 23:48	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:05	08/26/18 23:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:05	08/26/18 22:53	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:05	08/26/18 22:53	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/25/18 10:05	08/26/18 22:53	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 22:53	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 22:53	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 22:53	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:05	08/26/18 22:53	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 22:53	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:05	08/26/18 22:53	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:05	08/26/18 22:53	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:05	08/26/18 22:53	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:05	08/26/18 22:53	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:05	08/26/18 22:53	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: FB-03-082318
Date Collected: 08/23/18 08:00
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:05	08/26/18 22:53	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:05	08/26/18 22:53	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:05	08/26/18 22:53	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:05	08/26/18 22:53	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 22:53	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:05	08/26/18 22:53	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:05	08/26/18 22:53	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 22:53	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:05	08/26/18 22:53	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 22:53	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:05	08/26/18 22:53	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:05	08/26/18 22:53	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:05	08/26/18 22:53	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:05	08/26/18 22:53	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:05	08/26/18 22:53	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 22:53	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 22:53	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:05	08/26/18 22:53	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:05	08/26/18 22:53	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 22:53	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:05	08/26/18 22:53	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:05	08/26/18 22:53	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:05	08/26/18 22:53	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 22:53	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 22:53	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 22:53	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:05	08/26/18 22:53	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 22:53	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 22:53	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:05	08/26/18 22:53	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:05	08/26/18 22:53	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:05	08/26/18 22:53	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:05	08/26/18 22:53	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:05	08/26/18 22:53	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:05	08/26/18 22:53	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 22:53	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 22:53	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:05	08/26/18 22:53	1
Benzaldehyde	0.59	U *	10	0.59	ug/L		08/25/18 10:05	08/26/18 22:53	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/25/18 10:05	08/26/18 22:53	1
Atrazine	1.3	U *	2.0	1.3	ug/L		08/25/18 10:05	08/26/18 22:53	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 22:53	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 22:53	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 22:53	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 22:53	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 22:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:05*	*08/26/18 22:53*	*1*

Client Sample ID: FB-03-082318
Date Collected: 08/23/18 08:00
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-18
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*103*		*30 - 130*	*08/25/18 10:05*	*08/26/18 22:53*	*1*
Phenol-d5 (Surr)	*27*		*15 - 110*	*08/25/18 10:05*	*08/26/18 22:53*	*1*
Terphenyl-d14 (Surr)	*98*		*30 - 130*	*08/25/18 10:05*	*08/26/18 22:53*	*1*
2,4,6-Tribromophenol (Surr)	*101*		*15 - 110*	*08/25/18 10:05*	*08/26/18 22:53*	*1*
2-Fluorophenol (Surr)	*43*		*15 - 110*	*08/25/18 10:05*	*08/26/18 22:53*	*1*
2-Fluorobiphenyl	*90*		*30 - 130*	*08/25/18 10:05*	*08/26/18 22:53*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 19:08	08/25/18 23:18	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 19:08	08/25/18 23:18	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 19:08	08/25/18 23:18	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 19:08	08/25/18 23:18	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 19:08	08/25/18 23:18	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 19:08	08/25/18 23:18	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 19:08	08/25/18 23:18	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 19:08	08/25/18 23:18	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 19:08	08/25/18 23:18	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 19:08	08/25/18 23:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*74*		*30 - 150*	*08/24/18 19:08*	*08/25/18 23:18*	*1*
Tetrachloro-m-xylene	*73*		*30 - 150*	*08/24/18 19:08*	*08/25/18 23:18*	*1*
DCB Decachlorobiphenyl	*85*		*30 - 150*	*08/24/18 19:08*	*08/25/18 23:18*	*1*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*08/24/18 19:08*	*08/25/18 23:18*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/26/18 18:14	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/26/18 18:14	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 21:57	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/29/18 10:35	08/29/18 21:57	2
Barium	1.1	U	4.0	1.1	ug/L		08/29/18 10:35	08/29/18 21:57	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 21:57	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 21:57	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:57	2
Chromium	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:57	2
Copper	1.9	U	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 21:57	2
Manganese	2.7	U	8.0	2.7	ug/L		08/29/18 10:35	08/29/18 21:57	2
Nickel	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 21:57	2
Lead	0.37	U	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 21:57	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 21:57	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 21:57	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 21:57	2
Zinc	5.4	U	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 21:57	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/29/18 10:35	08/29/18 21:57	2
Sodium	75.7	U	200	75.7	ug/L		08/29/18 10:35	08/29/18 21:57	2
Magnesium	65.7	U	200	65.7	ug/L		08/29/18 10:35	08/29/18 21:57	2

Client Sample ID: FB-03-082318
Date Collected: 08/23/18 08:00
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-18
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	64.9	U	200	64.9	ug/L		08/29/18 10:35	08/29/18 21:57	2
Calcium	67.6	U	200	67.6	ug/L		08/29/18 10:35	08/29/18 21:57	2
Iron	45.7	U	120	45.7	ug/L		08/29/18 10:35	08/29/18 21:57	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 21:57	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/27/18 09:32	08/27/18 16:52	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/27/18 09:32	08/27/18 16:52	2
Barium	1.1	U	4.0	1.1	ug/L		08/27/18 09:32	08/27/18 16:52	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/27/18 09:32	08/27/18 16:52	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/27/18 09:32	08/27/18 16:52	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:52	2
Chromium	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:52	2
Copper	1.9	U	4.0	1.9	ug/L		08/27/18 09:32	08/27/18 16:52	2
Manganese	2.7	U	8.0	2.7	ug/L		08/27/18 09:32	08/27/18 16:52	2
Nickel	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 16:52	2
Lead	0.37	U	1.2	0.37	ug/L		08/27/18 09:32	08/27/18 16:52	2
Antimony	0.62	U	2.0	0.62	ug/L		08/27/18 09:32	08/27/18 16:52	2
Selenium	0.69	U	10.0	0.69	ug/L		08/27/18 09:32	08/27/18 16:52	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/27/18 09:32	08/27/18 16:52	2
Zinc	5.4	U	16.0	5.4	ug/L		08/27/18 09:32	08/27/18 16:52	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/27/18 09:32	08/27/18 16:52	2
Sodium	75.7	U	200	75.7	ug/L		08/27/18 09:32	08/27/18 16:52	2
Magnesium	65.7	U	200	65.7	ug/L		08/27/18 09:32	08/27/18 16:52	2
Potassium	64.9	U	200	64.9	ug/L		08/27/18 09:32	08/27/18 16:52	2
Calcium	67.6	U	200	67.6	ug/L		08/27/18 09:32	08/27/18 16:52	2
Iron	45.7	U	120	45.7	ug/L		08/27/18 09:32	08/27/18 16:52	2
Thallium	0.24	U	0.80	0.24	ug/L		08/27/18 09:32	08/27/18 16:52	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 16:30	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 17:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:44	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/26/18 09:39	1
Alkalinity	5.0	U	5.0	5.0	mg/L			08/26/18 09:39	1

Surrogate Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
460-163158-A-1 MS	Matrix Spike	108	101	102	99
460-163158-A-1 MSD	Matrix Spike Duplicate	114	99	105	98
460-163188-2	OB-13-082218	113	98	105	99
460-163188-3	OB-10-082218	119	95	108	97
460-163188-4	OB-29-082218	112	93	108	98
460-163188-5	OB-15B-082218	116	94	109	96
460-163188-6	OB-33-082218	116	96	104	97
460-163188-7	OB-32-082218	115	93	108	97
460-163188-9	OB-19-082218	114	95	109	95
460-163188-10	OB-11R-082218	117	96	107	95
460-163188-11	RW-5A-082218	117	94	105	98
460-163188-12	OB-21-082218	119	93	114	98
460-163188-13	OB-27-082218	116	99	107	101
460-163188-14	OB-30B-082218	112	94	105	99
460-163188-15	OB-31-082218	122	95	113	98
460-163188-16	RW-7-082218	118	93	111	98
460-163188-17	TB-02-082318	112	96	106	98
460-163188-18	FB-03-082318	115	95	106	99
460-163302-B-5 MS	Matrix Spike	107	101	104	99
460-163302-B-5 MSD	Matrix Spike Duplicate	111	98	100	98
LCS 460-547649/4	Lab Control Sample	100	100	99	98
LCS 460-548123/4	Lab Control Sample	116	100	102	99
MB 460-547649/8	Method Blank	115	95	109	98
MB 460-548123/8	Method Blank	115	93	106	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(70-130)
460-163188-2	OB-13-082218	98
460-163188-3	OB-10-082218	99
460-163188-4	OB-29-082218	101
460-163188-5	OB-15B-082218	102
460-163188-6	OB-33-082218	103
460-163188-7	OB-32-082218	97
460-163188-9	OB-19-082218	100
460-163188-10	OB-11R-082218	99
460-163188-11	RW-5A-082218	105
460-163188-12	OB-21-082218	105
460-163188-13	OB-27-082218	108
460-163188-14	OB-30B-082218	110

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	BFB (70-130)						
460-163188-15	OB-31-082218	104						
460-163188-16	RW-7-082218	109						
460-163188-17	TB-02-082318	111						
460-163188-18	FB-03-082318	109						
LCS 460-547854/3	Lab Control Sample	106						
LCS 460-547967/4	Lab Control Sample	107						
LCS 460-548240/4	Lab Control Sample	109						
LCSD 460-547854/4	Lab Control Sample Dup	105						
LCSD 460-547967/5	Lab Control Sample Dup	107						
LCSD 460-548240/5	Lab Control Sample Dup	108						
MB 460-547854/8	Method Blank	107						
MB 460-547967/8	Method Blank	106						
MB 460-548240/8	Method Blank	110						

Surrogate Legend

BFB = 4-Bromofluorobenzene

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	NBZ (30-130)	PHL (15-110)	TPHL (30-130)	TBP (15-110)	2FP (15-110)	FBP (30-130)		
460-163188-2	OB-13-082218	102	28	98	106	44	86		
460-163188-3	OB-10-082218	107	28	99	108	46	91		
460-163188-4	OB-29-082218	106	21	101	99	35	89		
460-163188-5	OB-15B-082218	98	27	91	102	42	81		
460-163188-6	OB-33-082218	98	28	93	99	43	81		
460-163188-7	OB-32-082218	91	26	93	94	40	73		
460-163188-9	OB-19-082218	92	36	94	94	51	92		
460-163188-10	OB-11R-082218	93	37	98	104	53	95		
460-163188-11	RW-5A-082218	105	31	99	105	50	94		
460-163188-12	OB-21-082218	94	22	86	96	34	80		
460-163188-13	OB-27-082218	89	29	93	92	44	90		
460-163188-14	OB-30B-082218	109	36	110	114 X	54	108		
460-163188-15	OB-31-082218	102	23	98	102	39	83		
460-163188-16	RW-7-082218	86	22	83	88	34	75		
460-163188-18	FB-03-082318	103	27	98	101	43	90		
460-163302-L-21-A MS	Matrix Spike	77	28	83	94	43	84		
460-163302-L-21-B MSD	Matrix Spike Duplicate	79	29	89	97	44	87		
LCS 460-547375/2-A	Lab Control Sample	91	21	86	94	34	82		
LCS 460-547375/4-A	Lab Control Sample	90	22	87	91	35	74		
LCS 460-548149/2-A	Lab Control Sample	98	35	100	112 X	52	100		
LCS 460-548149/3-A	Lab Control Sample	99	32	103	106	48	95		
LCSD 460-547375/3-A	Lab Control Sample Dup	99	23	90	104	36	88		
LCSD 460-547375/5-A	Lab Control Sample Dup	95	22	92	98	36	79		
MB 460-547375/1-A	Method Blank	97	29	85	99	43	82		
MB 460-548149/1-A	Method Blank	98	32	97	103	48	94		

Surrogate Legend

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

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCBP1	DCBP2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
460-163149-O-2-A MS	Matrix Spike	61	61	70	72
460-163149-O-2-B MSD	Matrix Spike Duplicate	63	65	72	76
460-163188-2	OB-13-082218	66	67	74	77
460-163188-3	OB-10-082218	67	68	77	81
460-163188-4	OB-29-082218	65	64	75	77
460-163188-5	OB-15B-082218	72	72	82	78
460-163188-6	OB-33-082218	74	74	85	81
460-163188-7	OB-32-082218	75	74	85	81
460-163188-9	OB-19-082218	76	81	86	90
460-163188-10	OB-11R-082218	69	68	80	79
460-163188-11	RW-5A-082218	72	73	82	81
460-163188-12	OB-21-082218	74	74	85	85
460-163188-13	OB-27-082218	94	96	108	107
460-163188-14	OB-30B-082218	75	75	87	85
460-163188-15	OB-31-082218	73	72	86	83
460-163188-16	RW-7-082218	71	71	83	80
460-163188-18	FB-03-082318	74	73	85	82
LCS 460-547236/2-A	Lab Control Sample	73	72	82	82
LCS 460-547238/2-A	Lab Control Sample	84	88	93	95
LCSD 460-547238/3-A	Lab Control Sample Dup	84	85	95	91
MB 460-547236/1-A	Method Blank	75	75	82	86
MB 460-547238/1-A	Method Blank	80	80	91	88

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Isotope Dilution Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (10-150)							
460-163188-2	OB-13-082218	33							
460-163188-3	OB-10-082218	36							
460-163188-4	OB-29-082218	36							
460-163188-5	OB-15B-082218	38							
460-163188-6	OB-33-082218	33							
460-163188-7	OB-32-082218	37							
460-163188-9	OB-19-082218	35							
460-163188-10	OB-11R-082218	39							
460-163188-11	RW-5A-082218	35							
460-163188-12	OB-21-082218	38							
460-163188-13	OB-27-082218	36							
460-163188-14	OB-30B-082218	36							
460-163188-15	OB-31-082218	36							
460-163188-16	RW-7-082218	37							
460-163188-18	FB-03-082318	35							
MB 460-547378/1-A	Method Blank	29							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (10-200)							
LCS 460-547378/2-A	Lab Control Sample	32							
LCSD 460-547378/3-A	Lab Control Sample Dup	32							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-547649/8
Matrix: Water
Analysis Batch: 547649

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/27/18 09:12	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/27/18 09:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/27/18 09:12	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 09:12	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/27/18 09:12	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/27/18 09:12	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/27/18 09:12	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/27/18 09:12	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/27/18 09:12	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/27/18 09:12	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/27/18 09:12	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/27/18 09:12	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/27/18 09:12	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/27/18 09:12	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/27/18 09:12	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/27/18 09:12	1
Acetone	5.0	U	5.0	5.0	ug/L			08/27/18 09:12	1
Benzene	0.43	U	1.0	0.43	ug/L			08/27/18 09:12	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/27/18 09:12	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/27/18 09:12	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/27/18 09:12	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/27/18 09:12	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/27/18 09:12	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/27/18 09:12	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/27/18 09:12	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/27/18 09:12	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/27/18 09:12	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/27/18 09:12	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/27/18 09:12	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/27/18 09:12	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/27/18 09:12	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/27/18 09:12	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/27/18 09:12	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/27/18 09:12	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/27/18 09:12	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/27/18 09:12	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/27/18 09:12	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/27/18 09:12	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/27/18 09:12	1
Styrene	0.42	U	1.0	0.42	ug/L			08/27/18 09:12	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/27/18 09:12	1
Toluene	0.38	U	1.0	0.38	ug/L			08/27/18 09:12	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/27/18 09:12	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/27/18 09:12	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/27/18 09:12	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/27/18 09:12	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/27/18 09:12	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/27/18 09:12	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/27/18 09:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		70 - 130		08/27/18 09:12	1
4-Bromofluorobenzene	95		70 - 130		08/27/18 09:12	1
Dibromofluoromethane (Surr)	109		70 - 130		08/27/18 09:12	1
Toluene-d8 (Surr)	98		70 - 130		08/27/18 09:12	1

Lab Sample ID: LCS 460-547649/4
Matrix: Water
Analysis Batch: 547649

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	21.8		ug/L		109	70 - 130
1,1,2,2-Tetrachloroethane	20.0	20.7		ug/L		103	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	19.9		ug/L		99	70 - 130
1,1,2-Trichloroethane	20.0	19.2		ug/L		96	70 - 130
1,1-Dichloroethane	20.0	20.2		ug/L		101	70 - 130
1,1-Dichloroethene	20.0	20.6		ug/L		103	70 - 130
1,2,3-Trichlorobenzene	20.0	20.0		ug/L		100	70 - 130
1,2,4-Trichlorobenzene	20.0	19.9		ug/L		100	70 - 130
1,2-Dichlorobenzene	20.0	20.0		ug/L		100	70 - 130
1,2-Dichloroethane	20.0	19.0		ug/L		95	70 - 130
1,2-Dichloropropane	20.0	19.3		ug/L		97	70 - 130
1,3-Dichlorobenzene	20.0	20.4		ug/L		102	70 - 130
1,4-Dichlorobenzene	20.0	20.7		ug/L		103	70 - 130
2-Butanone (MEK)	100	89.4		ug/L		89	40 - 160
2-Hexanone	100	93.6		ug/L		94	40 - 160
4-Methyl-2-pentanone (MIBK)	100	100		ug/L		100	40 - 160
Acetone	100	93.3		ug/L		93	40 - 160
Benzene	20.0	20.4		ug/L		102	70 - 130
Bromoform	20.0	20.1		ug/L		100	70 - 130
Bromomethane	20.0	18.5		ug/L		93	40 - 160
Carbon disulfide	20.0	20.8		ug/L		104	40 - 160
Carbon tetrachloride	20.0	21.6		ug/L		108	70 - 130
Chlorobenzene	20.0	19.2		ug/L		96	70 - 130
Chlorobromomethane	20.0	18.9		ug/L		94	70 - 130
Chlorodibromomethane	20.0	19.7		ug/L		99	70 - 130
Chloroethane	20.0	19.8		ug/L		99	40 - 160
Chloroform	20.0	20.4		ug/L		102	70 - 130
Chloromethane	20.0	19.7		ug/L		98	40 - 160
cis-1,2-Dichloroethene	20.0	19.7		ug/L		98	70 - 130
cis-1,3-Dichloropropene	20.0	18.8		ug/L		94	70 - 130
Cyclohexane	20.0	20.8		ug/L		104	70 - 130
Dichlorobromomethane	20.0	20.1		ug/L		101	70 - 130
Dichlorodifluoromethane	20.0	20.3		ug/L		101	40 - 160
Ethylbenzene	20.0	20.1		ug/L		101	70 - 130
Isopropylbenzene	20.0	21.7		ug/L		109	70 - 130
Methyl acetate	40.0	39.4		ug/L		98	70 - 130
Methyl tert-butyl ether	20.0	19.6		ug/L		98	70 - 130
Methylcyclohexane	20.0	20.6		ug/L		103	70 - 130
Methylene Chloride	20.0	19.4		ug/L		97	70 - 130

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

Lab Sample ID: LCS 460-547649/4
Matrix: Water
Analysis Batch: 547649

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	20.0	20.6		ug/L		103	70 - 130
Tetrachloroethene	20.0	19.2		ug/L		96	70 - 130
Toluene	20.0	20.3		ug/L		101	70 - 130
trans-1,2-Dichloroethene	20.0	20.0		ug/L		100	70 - 130
trans-1,3-Dichloropropene	20.0	18.5		ug/L		93	70 - 130
Trichloroethene	20.0	19.2		ug/L		96	70 - 130
Trichlorofluoromethane	20.0	20.5		ug/L		103	40 - 160
Vinyl chloride	20.0	20.1		ug/L		101	70 - 130
Xylenes, Total	40.0	40.5		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: 460-163158-A-1 MS
Matrix: Water
Analysis Batch: 547649

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.24	U	200	221		ug/L		110	70 - 130
1,1,2,2-Tetrachloroethane	0.37	U	200	226		ug/L		113	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	200	212		ug/L		106	70 - 130
1,1,2-Trichloroethane	0.43	U	200	207		ug/L		103	70 - 130
1,1-Dichloroethane	0.26	U	200	209		ug/L		104	70 - 130
1,1-Dichloroethene	0.12	U	200	216		ug/L		108	70 - 130
1,2,3-Trichlorobenzene	0.36	U	200	209		ug/L		104	70 - 130
1,2,4-Trichlorobenzene	0.37	U	200	213		ug/L		106	70 - 130
1,2-Dichlorobenzene	0.43	U	200	205		ug/L		103	70 - 130
1,2-Dichloroethane	0.43	U	200	201		ug/L		100	70 - 130
1,2-Dichloropropane	0.35	U	200	202		ug/L		101	70 - 130
1,3-Dichlorobenzene	0.34	U	200	205		ug/L		103	70 - 130
1,4-Dichlorobenzene	0.76	U	200	213		ug/L		106	70 - 130
2-Butanone (MEK)	4.4	J	1000	930		ug/L		93	40 - 160
2-Hexanone	2.9	U	1000	1070		ug/L		107	40 - 160
4-Methyl-2-pentanone (MIBK)	2.7	U	1000	1130		ug/L		113	40 - 160
Acetone	20		1000	1030		ug/L		101	40 - 160
Benzene	71		200	278		ug/L		103	70 - 130
Bromoform	0.54	U	200	202		ug/L		101	70 - 130
Bromomethane	1.0	U	200	200		ug/L		100	40 - 160
Carbon disulfide	1.0		200	224		ug/L		112	40 - 160
Carbon tetrachloride	0.21	U	200	225		ug/L		113	70 - 130
Chlorobenzene	0.38	U	200	196		ug/L		98	70 - 130
Chlorobromomethane	0.41	U	200	204		ug/L		102	70 - 130
Chlorodibromomethane	0.28	U	200	200		ug/L		100	70 - 130
Chloroethane	0.32	U	200	221		ug/L		111	40 - 160

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

Lab Sample ID: 460-163158-A-1 MS
Matrix: Water
Analysis Batch: 547649

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	0.33	U	200	212		ug/L		106	70 - 130
Chloromethane	0.14	U	200	215		ug/L		108	40 - 160
cis-1,2-Dichloroethene	0.22	U	200	207		ug/L		104	70 - 130
cis-1,3-Dichloropropene	0.46	U	200	191		ug/L		95	70 - 130
Cyclohexane	9.3		200	221		ug/L		106	70 - 130
Dichlorobromomethane	0.34	U	200	207		ug/L		104	70 - 130
Dichlorodifluoromethane	0.12	U	200	201		ug/L		101	40 - 160
Ethylbenzene	41		200	246		ug/L		102	70 - 130
Isopropylbenzene	5.1		200	230		ug/L		113	70 - 130
Methyl acetate	0.31	U F1	400	553	F1	ug/L		138	70 - 130
Methyl tert-butyl ether	250		200	451		ug/L		103	70 - 130
Methylcyclohexane	6.5		200	220		ug/L		107	70 - 130
Methylene Chloride	0.32	U	200	211		ug/L		106	70 - 130
Styrene	0.52	J	200	211		ug/L		105	70 - 130
Tetrachloroethene	0.25	U	200	204		ug/L		102	70 - 130
Toluene	7.8		200	219		ug/L		105	70 - 130
trans-1,2-Dichloroethene	0.24	U	200	211		ug/L		106	70 - 130
trans-1,3-Dichloropropene	0.49	U	200	192		ug/L		96	70 - 130
Trichloroethene	0.31	U	200	203		ug/L		101	70 - 130
Trichlorofluoromethane	0.14	U	200	222		ug/L		111	40 - 160
Vinyl chloride	0.17	U	200	211		ug/L		105	70 - 130
Xylenes, Total	36		400	444		ug/L		102	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: 460-163158-A-1 MSD
Matrix: Water
Analysis Batch: 547649

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.24	U	200	235		ug/L		118	70 - 130	6	20
1,1,2,2-Tetrachloroethane	0.37	U	200	227		ug/L		113	70 - 130	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	200	227		ug/L		114	70 - 130	7	20
1,1,2-Trichloroethane	0.43	U	200	200		ug/L		100	70 - 130	3	20
1,1-Dichloroethane	0.26	U	200	219		ug/L		110	70 - 130	5	20
1,1-Dichloroethene	0.12	U	200	221		ug/L		110	70 - 130	2	20
1,2,3-Trichlorobenzene	0.36	U	200	219		ug/L		110	70 - 130	5	20
1,2,4-Trichlorobenzene	0.37	U	200	214		ug/L		107	70 - 130	1	20
1,2-Dichlorobenzene	0.43	U	200	213		ug/L		106	70 - 130	4	20
1,2-Dichloroethane	0.43	U	200	213		ug/L		106	70 - 130	6	20
1,2-Dichloropropane	0.35	U	200	204		ug/L		102	70 - 130	1	20
1,3-Dichlorobenzene	0.34	U	200	210		ug/L		105	70 - 130	2	20
1,4-Dichlorobenzene	0.76	U	200	212		ug/L		106	70 - 130	1	20

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

Lab Sample ID: 460-163158-A-1 MSD
Matrix: Water
Analysis Batch: 547649

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Butanone (MEK)	4.4	J	1000	896		ug/L		89	40 - 160	4	20
2-Hexanone	2.9	U	1000	1080		ug/L		108	40 - 160	1	20
4-Methyl-2-pentanone (MIBK)	2.7	U	1000	1120		ug/L		112	40 - 160	2	20
Acetone	20		1000	952		ug/L		93	40 - 160	8	20
Benzene	71		200	278		ug/L		103	70 - 130	0	20
Bromoform	0.54	U	200	212		ug/L		106	70 - 130	4	20
Bromomethane	1.0	U	200	206		ug/L		103	40 - 160	3	20
Carbon disulfide	1.0		200	227		ug/L		113	40 - 160	1	20
Carbon tetrachloride	0.21	U	200	238		ug/L		119	70 - 130	5	20
Chlorobenzene	0.38	U	200	198		ug/L		99	70 - 130	1	20
Chlorobromomethane	0.41	U	200	209		ug/L		105	70 - 130	2	20
Chlorodibromomethane	0.28	U	200	200		ug/L		100	70 - 130	0	20
Chloroethane	0.32	U	200	233		ug/L		116	40 - 160	5	20
Chloroform	0.33	U	200	220		ug/L		110	70 - 130	3	20
Chloromethane	0.14	U	200	228		ug/L		114	40 - 160	6	20
cis-1,2-Dichloroethene	0.22	U	200	220		ug/L		110	70 - 130	6	20
cis-1,3-Dichloropropene	0.46	U	200	190		ug/L		95	70 - 130	0	20
Cyclohexane	9.3		200	235		ug/L		113	70 - 130	6	20
Dichlorobromomethane	0.34	U	200	221		ug/L		110	70 - 130	6	20
Dichlorodifluoromethane	0.12	U	200	220		ug/L		110	40 - 160	9	20
Ethylbenzene	41		200	245		ug/L		102	70 - 130	0	20
Isopropylbenzene	5.1		200	226		ug/L		111	70 - 130	2	20
Methyl acetate	0.31	U F1	400	578	F1	ug/L		144	70 - 130	4	20
Methyl tert-butyl ether	250		200	477		ug/L		116	70 - 130	6	20
Methylcyclohexane	6.5		200	231		ug/L		112	70 - 130	5	20
Methylene Chloride	0.32	U	200	216		ug/L		108	70 - 130	2	20
Styrene	0.52	J	200	212		ug/L		106	70 - 130	0	20
Tetrachloroethene	0.25	U	200	204		ug/L		102	70 - 130	0	20
Toluene	7.8		200	217		ug/L		105	70 - 130	1	20
trans-1,2-Dichloroethene	0.24	U	200	218		ug/L		109	70 - 130	3	20
trans-1,3-Dichloropropene	0.49	U	200	192		ug/L		96	70 - 130	0	20
Trichloroethene	0.31	U	200	203		ug/L		102	70 - 130	0	20
Trichlorofluoromethane	0.14	U	200	236		ug/L		118	40 - 160	6	20
Vinyl chloride	0.17	U	200	219		ug/L		109	70 - 130	4	20
Xylenes, Total	36		400	453		ug/L		104	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*
4-Bromofluorobenzene	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 460-548123/8
Matrix: Water
Analysis Batch: 548123

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/28/18 20:01	1

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

Lab Sample ID: MB 460-548123/8
Matrix: Water
Analysis Batch: 548123

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/28/18 20:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/28/18 20:01	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/28/18 20:01	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/28/18 20:01	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/28/18 20:01	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/28/18 20:01	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/28/18 20:01	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/28/18 20:01	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/28/18 20:01	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/28/18 20:01	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/28/18 20:01	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/28/18 20:01	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/28/18 20:01	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/28/18 20:01	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/28/18 20:01	1
Acetone	5.0	U	5.0	5.0	ug/L			08/28/18 20:01	1
Benzene	0.43	U	1.0	0.43	ug/L			08/28/18 20:01	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/28/18 20:01	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/28/18 20:01	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/28/18 20:01	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/28/18 20:01	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/28/18 20:01	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/28/18 20:01	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/28/18 20:01	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/28/18 20:01	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/28/18 20:01	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/28/18 20:01	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/28/18 20:01	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/28/18 20:01	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/28/18 20:01	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/28/18 20:01	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/28/18 20:01	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/28/18 20:01	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/28/18 20:01	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/28/18 20:01	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/28/18 20:01	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/28/18 20:01	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/28/18 20:01	1
Styrene	0.42	U	1.0	0.42	ug/L			08/28/18 20:01	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/28/18 20:01	1
Toluene	0.38	U	1.0	0.38	ug/L			08/28/18 20:01	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/28/18 20:01	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/28/18 20:01	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/28/18 20:01	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/28/18 20:01	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/28/18 20:01	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/28/18 20:01	1

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

Lab Sample ID: MB 460-548123/8
Matrix: Water
Analysis Batch: 548123

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

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/28/18 20:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		70 - 130		08/28/18 20:01	1
4-Bromofluorobenzene	93		70 - 130		08/28/18 20:01	1
Dibromofluoromethane (Surr)	106		70 - 130		08/28/18 20:01	1
Toluene-d8 (Surr)	99		70 - 130		08/28/18 20:01	1

Lab Sample ID: LCS 460-548123/4
Matrix: Water
Analysis Batch: 548123

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.6		ug/L		103	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.9		ug/L		110	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	17.1		ug/L		85	70 - 130
1,1,2-Trichloroethane	20.0	19.3		ug/L		97	70 - 130
1,1-Dichloroethane	20.0	20.0		ug/L		100	70 - 130
1,1-Dichloroethene	20.0	19.1		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	20.0	20.1		ug/L		100	70 - 130
1,2,4-Trichlorobenzene	20.0	19.6		ug/L		98	70 - 130
1,2-Dichlorobenzene	20.0	19.2		ug/L		96	70 - 130
1,2-Dichloroethane	20.0	19.6		ug/L		98	70 - 130
1,2-Dichloropropane	20.0	19.3		ug/L		96	70 - 130
1,3-Dichlorobenzene	20.0	19.9		ug/L		99	70 - 130
1,4-Dichlorobenzene	20.0	19.9		ug/L		99	70 - 130
2-Butanone (MEK)	100	83.6		ug/L		84	40 - 160
2-Hexanone	100	86.3		ug/L		86	40 - 160
4-Methyl-2-pentanone (MIBK)	100	89.1		ug/L		89	40 - 160
Acetone	100	85.1		ug/L		85	40 - 160
Benzene	20.0	20.0		ug/L		100	70 - 130
Bromoform	20.0	19.6		ug/L		98	70 - 130
Bromomethane	20.0	20.6		ug/L		103	40 - 160
Carbon disulfide	20.0	17.6		ug/L		88	40 - 160
Carbon tetrachloride	20.0	20.8		ug/L		104	70 - 130
Chlorobenzene	20.0	18.8		ug/L		94	70 - 130
Chlorobromomethane	20.0	19.4		ug/L		97	70 - 130
Chlorodibromomethane	20.0	20.2		ug/L		101	70 - 130
Chloroethane	20.0	21.6		ug/L		108	40 - 160
Chloroform	20.0	20.2		ug/L		101	70 - 130
Chloromethane	20.0	20.4		ug/L		102	40 - 160
cis-1,2-Dichloroethene	20.0	19.8		ug/L		99	70 - 130
cis-1,3-Dichloropropene	20.0	18.9		ug/L		95	70 - 130
Cyclohexane	20.0	18.0		ug/L		90	70 - 130
Dichlorobromomethane	20.0	21.0		ug/L		105	70 - 130
Dichlorodifluoromethane	20.0	18.1		ug/L		90	40 - 160
Ethylbenzene	20.0	19.0		ug/L		95	70 - 130

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

Lab Sample ID: LCS 460-548123/4
Matrix: Water
Analysis Batch: 548123

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	20.0	20.4		ug/L		102	70 - 130
Methyl acetate	40.0	43.3		ug/L		108	70 - 130
Methyl tert-butyl ether	20.0	20.5		ug/L		102	70 - 130
Methylcyclohexane	20.0	18.3		ug/L		92	70 - 130
Methylene Chloride	20.0	19.9		ug/L		100	70 - 130
Styrene	20.0	19.7		ug/L		99	70 - 130
Tetrachloroethene	20.0	18.5		ug/L		92	70 - 130
Toluene	20.0	19.5		ug/L		98	70 - 130
trans-1,2-Dichloroethene	20.0	19.9		ug/L		100	70 - 130
trans-1,3-Dichloropropene	20.0	19.6		ug/L		98	70 - 130
Trichloroethene	20.0	18.9		ug/L		95	70 - 130
Trichlorofluoromethane	20.0	21.1		ug/L		106	40 - 160
Vinyl chloride	20.0	20.2		ug/L		101	70 - 130
Xylenes, Total	40.0	38.7		ug/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: 460-163302-B-5 MS
Matrix: Water
Analysis Batch: 548123

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.24	U	20.0	19.8		ug/L		99	70 - 130
1,1,2,2-Tetrachloroethane	0.37	U	20.0	20.1		ug/L		101	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	15.8		ug/L		79	70 - 130
1,1,2-Trichloroethane	0.43	U	20.0	18.7		ug/L		93	70 - 130
1,1-Dichloroethane	0.26	U	20.0	19.2		ug/L		96	70 - 130
1,1-Dichloroethene	0.12	U	20.0	17.9		ug/L		90	70 - 130
1,2,3-Trichlorobenzene	0.36	U	20.0	17.8		ug/L		89	70 - 130
1,2,4-Trichlorobenzene	0.37	U	20.0	17.9		ug/L		90	70 - 130
1,2-Dichlorobenzene	0.43	U	20.0	18.8		ug/L		94	70 - 130
1,2-Dichloroethane	0.43	U	20.0	17.9		ug/L		90	70 - 130
1,2-Dichloropropane	0.35	U	20.0	18.4		ug/L		92	70 - 130
1,3-Dichlorobenzene	0.34	U	20.0	18.6		ug/L		93	70 - 130
1,4-Dichlorobenzene	0.76	U	20.0	18.4		ug/L		92	70 - 130
2-Butanone (MEK)	1.9	U	100	89.0		ug/L		89	40 - 160
2-Hexanone	2.9	U	100	92.0		ug/L		92	40 - 160
4-Methyl-2-pentanone (MIBK)	2.7	U	100	98.7		ug/L		99	40 - 160
Acetone	5.0	U F2	100	81.0		ug/L		81	40 - 160
Benzene	0.43	U	20.0	18.9		ug/L		95	70 - 130
Bromoform	0.54	U	20.0	17.5		ug/L		88	70 - 130
Bromomethane	1.0	U	20.0	20.5		ug/L		102	40 - 160
Carbon disulfide	0.16	U	20.0	16.1		ug/L		81	40 - 160

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

Lab Sample ID: 460-163302-B-5 MS
Matrix: Water
Analysis Batch: 548123

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	0.21	U	20.0	19.7		ug/L		99	70 - 130
Chlorobenzene	0.38	U	20.0	17.2		ug/L		86	70 - 130
Chlorobromomethane	0.41	U	20.0	18.4		ug/L		92	70 - 130
Chlorodibromomethane	0.28	U	20.0	18.2		ug/L		91	70 - 130
Chloroethane	0.32	U	20.0	20.7		ug/L		104	40 - 160
Chloroform	0.33	U	20.0	19.2		ug/L		96	70 - 130
Chloromethane	0.14	U	20.0	20.7		ug/L		104	40 - 160
cis-1,2-Dichloroethene	0.22	U	20.0	19.0		ug/L		95	70 - 130
cis-1,3-Dichloropropene	0.46	U	20.0	16.7		ug/L		83	70 - 130
Cyclohexane	0.32	U	20.0	16.1		ug/L		81	70 - 130
Dichlorobromomethane	0.34	U	20.0	18.5		ug/L		92	70 - 130
Dichlorodifluoromethane	0.12	U	20.0	17.6		ug/L		88	40 - 160
Ethylbenzene	0.30	U	20.0	17.6		ug/L		88	70 - 130
Isopropylbenzene	0.34	U	20.0	18.7		ug/L		93	70 - 130
Methyl acetate	0.31	U	40.0	36.1		ug/L		90	70 - 130
Methyl tert-butyl ether	0.47	U	20.0	18.4		ug/L		92	70 - 130
Methylcyclohexane	0.26	U	20.0	15.3		ug/L		76	70 - 130
Methylene Chloride	0.32	U	20.0	19.3		ug/L		96	70 - 130
Styrene	0.42	U	20.0	15.9		ug/L		80	70 - 130
Tetrachloroethene	0.25	U	20.0	17.1		ug/L		85	70 - 130
Toluene	0.38	U	20.0	18.3		ug/L		92	70 - 130
trans-1,2-Dichloroethene	0.24	U	20.0	18.4		ug/L		92	70 - 130
trans-1,3-Dichloropropene	0.49	U	20.0	16.4		ug/L		82	70 - 130
Trichloroethene	0.31	U	20.0	17.4		ug/L		87	70 - 130
Trichlorofluoromethane	0.14	U	20.0	19.9		ug/L		100	40 - 160
Vinyl chloride	0.17	U	20.0	19.4		ug/L		97	70 - 130
Xylenes, Total	0.65	U	40.0	35.1		ug/L		88	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
4-Bromofluorobenzene	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: 460-163302-B-5 MSD
Matrix: Water
Analysis Batch: 548123

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.24	U	20.0	20.6		ug/L		103	70 - 130	4	20
1,1,2,2-Tetrachloroethane	0.37	U	20.0	20.6		ug/L		103	70 - 130	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	15.8		ug/L		79	70 - 130	0	20
1,1,2-Trichloroethane	0.43	U	20.0	18.9		ug/L		94	70 - 130	1	20
1,1-Dichloroethane	0.26	U	20.0	19.8		ug/L		99	70 - 130	3	20
1,1-Dichloroethene	0.12	U	20.0	18.2		ug/L		91	70 - 130	2	20
1,2,3-Trichlorobenzene	0.36	U	20.0	19.3		ug/L		96	70 - 130	8	20
1,2,4-Trichlorobenzene	0.37	U	20.0	18.8		ug/L		94	70 - 130	5	20

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

Lab Sample ID: 460-163302-B-5 MSD
Matrix: Water
Analysis Batch: 548123

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	0.43	U	20.0	19.0		ug/L		95	70 - 130	1	20
1,2-Dichloroethane	0.43	U	20.0	19.3		ug/L		96	70 - 130	7	20
1,2-Dichloropropane	0.35	U	20.0	18.8		ug/L		94	70 - 130	3	20
1,3-Dichlorobenzene	0.34	U	20.0	19.7		ug/L		99	70 - 130	6	20
1,4-Dichlorobenzene	0.76	U	20.0	19.8		ug/L		99	70 - 130	7	20
2-Butanone (MEK)	1.9	U	100	84.4		ug/L		84	40 - 160	5	20
2-Hexanone	2.9	U	100	92.9		ug/L		93	40 - 160	1	20
4-Methyl-2-pentanone (MIBK)	2.7	U	100	99.7		ug/L		100	40 - 160	1	20
Acetone	5.0	U F2	100	104	F2	ug/L		104	40 - 160	25	20
Benzene	0.43	U	20.0	19.3		ug/L		96	70 - 130	2	20
Bromoform	0.54	U	20.0	18.8		ug/L		94	70 - 130	7	20
Bromomethane	1.0	U	20.0	20.5		ug/L		102	40 - 160	0	20
Carbon disulfide	0.16	U	20.0	16.6		ug/L		83	40 - 160	3	20
Carbon tetrachloride	0.21	U	20.0	20.5		ug/L		102	70 - 130	4	20
Chlorobenzene	0.38	U	20.0	18.5		ug/L		92	70 - 130	7	20
Chlorobromomethane	0.41	U	20.0	18.9		ug/L		94	70 - 130	2	20
Chlorodibromomethane	0.28	U	20.0	18.2		ug/L		91	70 - 130	0	20
Chloroethane	0.32	U	20.0	20.2		ug/L		101	40 - 160	3	20
Chloroform	0.33	U	20.0	20.0		ug/L		100	70 - 130	4	20
Chloromethane	0.14	U	20.0	20.7		ug/L		104	40 - 160	0	20
cis-1,2-Dichloroethene	0.22	U	20.0	19.6		ug/L		98	70 - 130	3	20
cis-1,3-Dichloropropene	0.46	U	20.0	17.3		ug/L		86	70 - 130	4	20
Cyclohexane	0.32	U	20.0	17.1		ug/L		86	70 - 130	6	20
Dichlorobromomethane	0.34	U	20.0	19.4		ug/L		97	70 - 130	5	20
Dichlorodifluoromethane	0.12	U	20.0	17.9		ug/L		90	40 - 160	2	20
Ethylbenzene	0.30	U	20.0	18.3		ug/L		92	70 - 130	4	20
Isopropylbenzene	0.34	U	20.0	19.8		ug/L		99	70 - 130	6	20
Methyl acetate	0.31	U	40.0	36.2		ug/L		90	70 - 130	0	20
Methyl tert-butyl ether	0.47	U	20.0	19.0		ug/L		95	70 - 130	3	20
Methylcyclohexane	0.26	U	20.0	16.7		ug/L		83	70 - 130	9	20
Methylene Chloride	0.32	U	20.0	19.3		ug/L		96	70 - 130	0	20
Styrene	0.42	U	20.0	16.5		ug/L		83	70 - 130	4	20
Tetrachloroethene	0.25	U	20.0	17.6		ug/L		88	70 - 130	3	20
Toluene	0.38	U	20.0	19.0		ug/L		95	70 - 130	4	20
trans-1,2-Dichloroethene	0.24	U	20.0	19.1		ug/L		96	70 - 130	4	20
trans-1,3-Dichloropropene	0.49	U	20.0	17.3		ug/L		87	70 - 130	6	20
Trichloroethene	0.31	U	20.0	17.6		ug/L		88	70 - 130	1	20
Trichlorofluoromethane	0.14	U	20.0	20.4		ug/L		102	40 - 160	2	20
Vinyl chloride	0.17	U	20.0	20.3		ug/L		102	70 - 130	5	20
Xylenes, Total	0.65	U	40.0	36.1		ug/L		90	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*
4-Bromofluorobenzene	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 460-547854/8
Matrix: Water
Analysis Batch: 547854

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/27/18 22:21	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/27/18 22:21	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/27/18 22:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*70 - 130*		*08/27/18 22:21*	*1*

Lab Sample ID: LCS 460-547854/3
Matrix: Water
Analysis Batch: 547854

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.0500	0.0604		ug/L		121	40 - 160		
Ethylene Dibromide			0.0500	0.0479		ug/L		96	70 - 130		
1,2,3-Trichloropropane			0.0500	0.0548		ug/L		110	40 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*70 - 130*

Lab Sample ID: LCSD 460-547854/4
Matrix: Water
Analysis Batch: 547854

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.0500	0.0579		ug/L		116	40 - 160	4	20
Ethylene Dibromide			0.0500	0.0474		ug/L		95	70 - 130	1	20
1,2,3-Trichloropropane			0.0500	0.0569		ug/L		114	40 - 160	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*70 - 130*

Lab Sample ID: MB 460-547967/8
Matrix: Water
Analysis Batch: 547967

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/28/18 09:57	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/28/18 09:57	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/28/18 09:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*70 - 130*		*08/28/18 09:57*	*1*

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

Lab Sample ID: LCS 460-547967/4
Matrix: Water
Analysis Batch: 547967

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.0500	0.0559		ug/L		112	40 - 160		
Ethylene Dibromide			0.0500	0.0488		ug/L		98	70 - 130		
1,2,3-Trichloropropane			0.0500	0.0534		ug/L		107	40 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*70 - 130*

Lab Sample ID: LCSD 460-547967/5
Matrix: Water
Analysis Batch: 547967

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.0500	0.0499		ug/L		100	40 - 160	11	20
Ethylene Dibromide			0.0500	0.0470		ug/L		94	70 - 130	4	20
1,2,3-Trichloropropane			0.0500	0.0495		ug/L		99	40 - 160	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*70 - 130*

Lab Sample ID: MB 460-548240/8
Matrix: Water
Analysis Batch: 548240

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/29/18 09:32	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/29/18 09:32	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/29/18 09:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*70 - 130*		*08/29/18 09:32*	*1*

Lab Sample ID: LCS 460-548240/4
Matrix: Water
Analysis Batch: 548240

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.0500	0.0588		ug/L		118	40 - 160		
Ethylene Dibromide			0.0500	0.0510		ug/L		102	70 - 130		
1,2,3-Trichloropropane			0.0500	0.0601		ug/L		120	40 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*70 - 130*

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

Lab Sample ID: LCSD 460-548240/5
Matrix: Water
Analysis Batch: 548240

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.0500	0.0640		ug/L		128	40 - 160	8	20
Ethylene Dibromide			0.0500	0.0569		ug/L		114	70 - 130	11	20
1,2,3-Trichloropropane			0.0500	0.0664		ug/L		133	40 - 160	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*70 - 130*

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

Lab Sample ID: MB 460-547375/1-A
Matrix: Water
Analysis Batch: 547548

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547375

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/25/18 10:05	08/26/18 15:08	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/25/18 10:05	08/26/18 15:08	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/25/18 10:05	08/26/18 15:08	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 15:08	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 15:08	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 15:08	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/25/18 10:05	08/26/18 15:08	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 15:08	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/25/18 10:05	08/26/18 15:08	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/25/18 10:05	08/26/18 15:08	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/25/18 10:05	08/26/18 15:08	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/25/18 10:05	08/26/18 15:08	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/25/18 10:05	08/26/18 15:08	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		08/25/18 10:05	08/26/18 15:08	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		08/25/18 10:05	08/26/18 15:08	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/25/18 10:05	08/26/18 15:08	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/25/18 10:05	08/26/18 15:08	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/25/18 10:05	08/26/18 15:08	1
Isophorone	0.80	U	10	0.80	ug/L		08/25/18 10:05	08/26/18 15:08	1
Naphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 15:08	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/25/18 10:05	08/26/18 15:08	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/25/18 10:05	08/26/18 15:08	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 15:08	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/25/18 10:05	08/26/18 15:08	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 15:08	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/25/18 10:05	08/26/18 15:08	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/25/18 10:05	08/26/18 15:08	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/25/18 10:05	08/26/18 15:08	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/25/18 10:05	08/26/18 15:08	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/25/18 10:05	08/26/18 15:08	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 15:08	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/25/18 10:05	08/26/18 15:08	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/25/18 10:05	08/26/18 15:08	1

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

Lab Sample ID: MB 460-547375/1-A
Matrix: Water
Analysis Batch: 547548

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547375

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/25/18 10:05	08/26/18 15:08	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/25/18 10:05	08/26/18 15:08	1
Fluorene	0.91	U	10	0.91	ug/L		08/25/18 10:05	08/26/18 15:08	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/25/18 10:05	08/26/18 15:08	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/25/18 10:05	08/26/18 15:08	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 15:08	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		08/25/18 10:05	08/26/18 15:08	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/25/18 10:05	08/26/18 15:08	1
Anthracene	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 15:08	1
Carbazole	0.68	U	10	0.68	ug/L		08/25/18 10:05	08/26/18 15:08	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 15:08	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/25/18 10:05	08/26/18 15:08	1
Pyrene	1.6	U	10	1.6	ug/L		08/25/18 10:05	08/26/18 15:08	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/25/18 10:05	08/26/18 15:08	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		08/25/18 10:05	08/26/18 15:08	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/25/18 10:05	08/26/18 15:08	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/25/18 10:05	08/26/18 15:08	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/25/18 10:05	08/26/18 15:08	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		08/25/18 10:05	08/26/18 15:08	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/25/18 10:05	08/26/18 15:08	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		08/25/18 10:05	08/26/18 15:08	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		08/25/18 10:05	08/26/18 15:08	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		08/25/18 10:05	08/26/18 15:08	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 15:08	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 15:08	1
Acetophenone	0.79	U	10	0.79	ug/L		08/25/18 10:05	08/26/18 15:08	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/25/18 10:05	08/26/18 15:08	1
Caprolactam	0.68	U	10	0.68	ug/L		08/25/18 10:05	08/26/18 15:08	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/25/18 10:05	08/26/18 15:08	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/25/18 10:05	08/26/18 15:08	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/25/18 10:05	08/26/18 15:08	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/25/18 10:05	08/26/18 15:08	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/25/18 10:05	08/26/18 15:08	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/25/18 10:05	08/26/18 15:08	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/25/18 10:05*	*08/26/18 15:08*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*97*		*30 - 130*	*08/25/18 10:05*	*08/26/18 15:08*	*1*
Phenol-d5 (Surr)	*29*		*15 - 110*	*08/25/18 10:05*	*08/26/18 15:08*	*1*
Terphenyl-d14 (Surr)	*85*		*30 - 130*	*08/25/18 10:05*	*08/26/18 15:08*	*1*
2,4,6-Tribromophenol (Surr)	*99*		*15 - 110*	*08/25/18 10:05*	*08/26/18 15:08*	*1*
2-Fluorophenol (Surr)	*43*		*15 - 110*	*08/25/18 10:05*	*08/26/18 15:08*	*1*
2-Fluorobiphenyl	*82*		*30 - 130*	*08/25/18 10:05*	*08/26/18 15:08*	*1*

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

Lab Sample ID: LCS 460-547375/2-A
Matrix: Water
Analysis Batch: 547548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547375

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	80.0	20.0		ug/L		25	20 - 160
2-Chlorophenol	80.0	56.7		ug/L		71	70 - 130
2-Methylphenol	80.0	45.4	*	ug/L		57	70 - 130
4-Methylphenol	80.0	35.7		ug/L		45	20 - 160
2-Nitrophenol	80.0	74.5		ug/L		93	70 - 130
2,4-Dimethylphenol	80.0	62.0		ug/L		78	70 - 130
2,4-Dichlorophenol	80.0	68.8		ug/L		86	70 - 130
4-Chloro-3-methylphenol	80.0	64.6		ug/L		81	20 - 160
2,4,6-Trichlorophenol	80.0	72.6		ug/L		91	70 - 130
2,4,5-Trichlorophenol	80.0	70.1		ug/L		88	20 - 160
2,4-Dinitrotoluene	80.0	76.1		ug/L		95	70 - 130
4-Nitrophenol	160	44.4		ug/L		28	20 - 160
4,6-Dinitro-2-methylphenol	160	161		ug/L		100	20 - 160
Pentachlorophenol	160	149		ug/L		93	20 - 160
Bis(2-chloroethyl)ether	80.0	66.6		ug/L		83	70 - 130
N-Nitrosodi-n-propylamine	80.0	72.7		ug/L		91	70 - 130
Hexachloroethane	80.0	55.4		ug/L		69	20 - 160
Nitrobenzene	80.0	72.0		ug/L		90	70 - 130
Isophorone	80.0	75.7		ug/L		95	70 - 130
Naphthalene	80.0	64.7		ug/L		81	70 - 130
4-Chloroaniline	80.0	62.7		ug/L		78	20 - 160
Hexachlorobutadiene	80.0	63.9		ug/L		80	70 - 130
2-Methylnaphthalene	80.0	67.4		ug/L		84	70 - 130
Hexachlorocyclopentadiene	80.0	71.4		ug/L		89	20 - 160
2-Chloronaphthalene	80.0	70.0		ug/L		87	70 - 130
2-Nitroaniline	80.0	82.3		ug/L		103	20 - 160
Dimethyl phthalate	80.0	75.3		ug/L		94	70 - 130
Acenaphthylene	80.0	75.7		ug/L		95	70 - 130
2,6-Dinitrotoluene	80.0	78.6		ug/L		98	70 - 130
3-Nitroaniline	80.0	61.5		ug/L		77	20 - 160
Acenaphthene	80.0	62.7		ug/L		78	70 - 130
Dibenzofuran	80.0	72.0		ug/L		90	70 - 130
2,4-Dinitrophenol	160	143		ug/L		89	20 - 160
Diethyl phthalate	80.0	76.9		ug/L		96	70 - 130
4-Chlorophenyl phenyl ether	80.0	73.9		ug/L		92	70 - 130
Fluorene	80.0	73.9		ug/L		92	70 - 130
4-Nitroaniline	80.0	63.0		ug/L		79	20 - 160
N-Nitrosodiphenylamine	80.0	73.2		ug/L		92	70 - 130
4-Bromophenyl phenyl ether	80.0	77.0		ug/L		96	70 - 130
Hexachlorobenzene	80.0	76.8		ug/L		96	70 - 130
Phenanthrene	80.0	74.3		ug/L		93	70 - 130
Anthracene	80.0	74.2		ug/L		93	70 - 130
Carbazole	80.0	73.8		ug/L		92	70 - 130
Di-n-butyl phthalate	80.0	79.4		ug/L		99	70 - 130
Fluoranthene	80.0	75.3		ug/L		94	70 - 130
Pyrene	80.0	76.9		ug/L		96	70 - 130
Butyl benzyl phthalate	80.0	81.4		ug/L		102	70 - 130
Benzo[a]anthracene	80.0	76.7		ug/L		96	70 - 130

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

Lab Sample ID: LCS 460-547375/2-A
Matrix: Water
Analysis Batch: 547548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547375

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	80.0	74.8		ug/L		93	70 - 130
Bis(2-ethylhexyl) phthalate	80.0	79.6		ug/L		100	70 - 130
Di-n-octyl phthalate	80.0	88.2		ug/L		110	70 - 130
Benzo[b]fluoranthene	80.0	75.4		ug/L		94	70 - 130
Benzo[k]fluoranthene	80.0	81.1		ug/L		101	70 - 130
Benzo[a]pyrene	80.0	78.8		ug/L		99	70 - 130
Indeno[1,2,3-cd]pyrene	80.0	67.5		ug/L		84	70 - 130
Dibenz(a,h)anthracene	80.0	75.7		ug/L		95	70 - 130
Benzo[g,h,i]perylene	80.0	74.2		ug/L		93	70 - 130
1,1'-Biphenyl	80.0	70.1		ug/L		88	70 - 130
Acetophenone	80.0	71.7		ug/L		90	70 - 130
2,2'-oxybis[1-chloropropane]	80.0	69.4		ug/L		87	70 - 130
1,2,4,5-Tetrachlorobenzene	80.0	71.6		ug/L		90	70 - 130
2,3,4,6-Tetrachlorophenol	80.0	75.0		ug/L		94	70 - 130
3,3'-Dichlorobenzidine	80.0	71.6		ug/L		89	70 - 130
Bis(2-chloroethoxy)methane	80.0	70.6		ug/L		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*91*		*30 - 130*
Phenol-d5 (Surr)	*21*		*15 - 110*
Terphenyl-d14 (Surr)	*86*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*94*		*15 - 110*
2-Fluorophenol (Surr)	*34*		*15 - 110*
2-Fluorobiphenyl	*82*		*30 - 130*

Lab Sample ID: LCS 460-547375/4-A
Matrix: Water
Analysis Batch: 547548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547375

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	160	127		ug/L		79	20 - 160
Caprolactam	160	26.7	*	ug/L		17	20 - 160
Atrazine	160	154		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*90*		*30 - 130*
Phenol-d5 (Surr)	*22*		*15 - 110*
Terphenyl-d14 (Surr)	*87*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*91*		*15 - 110*
2-Fluorophenol (Surr)	*35*		*15 - 110*
2-Fluorobiphenyl	*74*		*30 - 130*

Lab Sample ID: LCSD 460-547375/3-A
Matrix: Water
Analysis Batch: 547548

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 547375

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	80.0	21.8		ug/L		27	20 - 160	8	20

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

Lab Sample ID: LCSD 460-547375/3-A
Matrix: Water
Analysis Batch: 547548

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 547375

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chlorophenol	80.0	61.0		ug/L		76	70 - 130	7	20
2-Methylphenol	80.0	48.9	*	ug/L		61	70 - 130	7	20
4-Methylphenol	80.0	38.5		ug/L		48	20 - 160	7	20
2-Nitrophenol	80.0	80.9		ug/L		101	70 - 130	8	20
2,4-Dimethylphenol	80.0	66.5		ug/L		83	70 - 130	7	20
2,4-Dichlorophenol	80.0	73.0		ug/L		91	70 - 130	6	20
4-Chloro-3-methylphenol	80.0	69.2		ug/L		86	20 - 160	7	20
2,4,6-Trichlorophenol	80.0	77.3		ug/L		97	70 - 130	6	20
2,4,5-Trichlorophenol	80.0	76.9		ug/L		96	20 - 160	9	20
2,4-Dinitrotoluene	80.0	81.4		ug/L		102	70 - 130	7	20
4-Nitrophenol	160	49.0		ug/L		31	20 - 160	10	20
4,6-Dinitro-2-methylphenol	160	172		ug/L		107	20 - 160	7	20
Pentachlorophenol	160	155		ug/L		97	20 - 160	4	20
Bis(2-chloroethyl)ether	80.0	72.3		ug/L		90	70 - 130	8	20
N-Nitrosodi-n-propylamine	80.0	78.3		ug/L		98	70 - 130	7	20
Hexachloroethane	80.0	60.8		ug/L		76	20 - 160	9	20
Nitrobenzene	80.0	79.3		ug/L		99	70 - 130	10	20
Isophorone	80.0	80.4		ug/L		101	70 - 130	6	20
Naphthalene	80.0	70.1		ug/L		88	70 - 130	8	20
4-Chloroaniline	80.0	67.3		ug/L		84	20 - 160	7	20
Hexachlorobutadiene	80.0	68.7		ug/L		86	70 - 130	7	20
2-Methylnaphthalene	80.0	72.4		ug/L		90	70 - 130	7	20
Hexachlorocyclopentadiene	80.0	78.8		ug/L		98	20 - 160	10	20
2-Chloronaphthalene	80.0	75.2		ug/L		94	70 - 130	7	20
2-Nitroaniline	80.0	88.3		ug/L		110	20 - 160	7	20
Dimethyl phthalate	80.0	80.8		ug/L		101	70 - 130	7	20
Acenaphthylene	80.0	82.1		ug/L		103	70 - 130	8	20
2,6-Dinitrotoluene	80.0	84.6		ug/L		106	70 - 130	7	20
3-Nitroaniline	80.0	66.1		ug/L		83	20 - 160	7	20
Acenaphthene	80.0	67.8		ug/L		85	70 - 130	8	20
Dibenzofuran	80.0	77.4		ug/L		97	70 - 130	7	20
2,4-Dinitrophenol	160	155		ug/L		97	20 - 160	8	20
Diethyl phthalate	80.0	82.3		ug/L		103	70 - 130	7	20
4-Chlorophenyl phenyl ether	80.0	81.0		ug/L		101	70 - 130	9	20
Fluorene	80.0	81.2		ug/L		101	70 - 130	9	20
4-Nitroaniline	80.0	66.8		ug/L		83	20 - 160	6	20
N-Nitrosodiphenylamine	80.0	78.4		ug/L		98	70 - 130	7	20
4-Bromophenyl phenyl ether	80.0	81.7		ug/L		102	70 - 130	6	20
Hexachlorobenzene	80.0	81.1		ug/L		101	70 - 130	5	20
Phenanthrene	80.0	77.4		ug/L		97	70 - 130	4	20
Anthracene	80.0	77.8		ug/L		97	70 - 130	5	20
Carbazole	80.0	78.2		ug/L		98	70 - 130	6	20
Di-n-butyl phthalate	80.0	83.6		ug/L		104	70 - 130	5	20
Fluoranthene	80.0	78.6		ug/L		98	70 - 130	4	20
Pyrene	80.0	81.7		ug/L		102	70 - 130	6	20
Butyl benzyl phthalate	80.0	86.2		ug/L		108	70 - 130	6	20
Benzo[a]anthracene	80.0	81.4		ug/L		102	70 - 130	6	20
Chrysene	80.0	78.4		ug/L		98	70 - 130	5	20

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

Lab Sample ID: LCSD 460-547375/3-A
Matrix: Water
Analysis Batch: 547548

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 547375

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate			80.0	85.6		ug/L		107	70 - 130	7	20
Di-n-octyl phthalate			80.0	94.3		ug/L		118	70 - 130	7	20
Benzo[b]fluoranthene			80.0	78.5		ug/L		98	70 - 130	4	20
Benzo[k]fluoranthene			80.0	86.2		ug/L		108	70 - 130	6	20
Benzo[a]pyrene			80.0	83.0		ug/L		104	70 - 130	5	20
Indeno[1,2,3-cd]pyrene			80.0	71.8		ug/L		90	70 - 130	6	20
Dibenz(a,h)anthracene			80.0	81.6		ug/L		102	70 - 130	7	20
Benzo[g,h,i]perylene			80.0	78.4		ug/L		98	70 - 130	6	20
1,1'-Biphenyl			80.0	75.7		ug/L		95	70 - 130	8	20
Acetophenone			80.0	77.1		ug/L		96	70 - 130	7	20
2,2'-oxybis[1-chloropropane]			80.0	74.6		ug/L		93	70 - 130	7	20
1,2,4,5-Tetrachlorobenzene			80.0	76.2		ug/L		95	70 - 130	6	20
2,3,4,6-Tetrachlorophenol			80.0	80.7		ug/L		101	70 - 130	7	20
3,3'-Dichlorobenzidine			80.0	75.6		ug/L		94	70 - 130	5	20
Bis(2-chloroethoxy)methane			80.0	77.0		ug/L		96	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*99*		*30 - 130*
Phenol-d5 (Surr)	*23*		*15 - 110*
Terphenyl-d14 (Surr)	*90*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*104*		*15 - 110*
2-Fluorophenol (Surr)	*36*		*15 - 110*
2-Fluorobiphenyl	*88*		*30 - 130*

Lab Sample ID: LCSD 460-547375/5-A
Matrix: Water
Analysis Batch: 547548

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 547375

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzaldehyde			160	203	*	ug/L		127	20 - 160	46	20
Caprolactam			160	41.9	*	ug/L		26	20 - 160	44	20
Atrazine			160	228	*	ug/L		143	70 - 130	39	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*95*		*30 - 130*
Phenol-d5 (Surr)	*22*		*15 - 110*
Terphenyl-d14 (Surr)	*92*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*98*		*15 - 110*
2-Fluorophenol (Surr)	*36*		*15 - 110*
2-Fluorobiphenyl	*79*		*30 - 130*

Lab Sample ID: MB 460-548149/1-A
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/28/18 20:11	08/29/18 07:49	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/28/18 20:11	08/29/18 07:49	1

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

Lab Sample ID: MB 460-548149/1-A
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	0.26	U	10	0.26	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 07:49	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/28/18 20:11	08/29/18 07:49	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/28/18 20:11	08/29/18 07:49	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		08/28/18 20:11	08/29/18 07:49	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		08/28/18 20:11	08/29/18 07:49	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/28/18 20:11	08/29/18 07:49	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/28/18 20:11	08/29/18 07:49	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/28/18 20:11	08/29/18 07:49	1
Isophorone	0.80	U	10	0.80	ug/L		08/28/18 20:11	08/29/18 07:49	1
Naphthalene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/28/18 20:11	08/29/18 07:49	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/28/18 20:11	08/29/18 07:49	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 07:49	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/28/18 20:11	08/29/18 07:49	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 07:49	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/28/18 20:11	08/29/18 07:49	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/28/18 20:11	08/29/18 07:49	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/28/18 20:11	08/29/18 07:49	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/28/18 20:11	08/29/18 07:49	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 07:49	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/28/18 20:11	08/29/18 07:49	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/28/18 20:11	08/29/18 07:49	1
Fluorene	0.91	U	10	0.91	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/28/18 20:11	08/29/18 07:49	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/28/18 20:11	08/29/18 07:49	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		08/28/18 20:11	08/29/18 07:49	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/28/18 20:11	08/29/18 07:49	1
Anthracene	0.63	U	10	0.63	ug/L		08/28/18 20:11	08/29/18 07:49	1
Carbazole	0.68	U	10	0.68	ug/L		08/28/18 20:11	08/29/18 07:49	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/28/18 20:11	08/29/18 07:49	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/28/18 20:11	08/29/18 07:49	1
Pyrene	1.6	U	10	1.6	ug/L		08/28/18 20:11	08/29/18 07:49	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/28/18 20:11	08/29/18 07:49	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		08/28/18 20:11	08/29/18 07:49	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/28/18 20:11	08/29/18 07:49	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/28/18 20:11	08/29/18 07:49	1

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

Lab Sample ID: MB 460-548149/1-A
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/28/18 20:11	08/29/18 07:49	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		08/28/18 20:11	08/29/18 07:49	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/28/18 20:11	08/29/18 07:49	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		08/28/18 20:11	08/29/18 07:49	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		08/28/18 20:11	08/29/18 07:49	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		08/28/18 20:11	08/29/18 07:49	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/28/18 20:11	08/29/18 07:49	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 07:49	1
Acetophenone	0.79	U	10	0.79	ug/L		08/28/18 20:11	08/29/18 07:49	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/28/18 20:11	08/29/18 07:49	1
Caprolactam	0.68	U	10	0.68	ug/L		08/28/18 20:11	08/29/18 07:49	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/28/18 20:11	08/29/18 07:49	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/28/18 20:11	08/29/18 07:49	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/28/18 20:11	08/29/18 07:49	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 07:49	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/28/18 20:11*	*08/29/18 07:49*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*98*		*30 - 130*	*08/28/18 20:11*	*08/29/18 07:49*	*1*
Phenol-d5 (Surr)	*32*		*15 - 110*	*08/28/18 20:11*	*08/29/18 07:49*	*1*
Terphenyl-d14 (Surr)	*97*		*30 - 130*	*08/28/18 20:11*	*08/29/18 07:49*	*1*
2,4,6-Tribromophenol (Surr)	*103*		*15 - 110*	*08/28/18 20:11*	*08/29/18 07:49*	*1*
2-Fluorophenol (Surr)	*48*		*15 - 110*	*08/28/18 20:11*	*08/29/18 07:49*	*1*
2-Fluorobiphenyl	*94*		*30 - 130*	*08/28/18 20:11*	*08/29/18 07:49*	*1*

Lab Sample ID: LCS 460-548149/2-A
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	80.0	30.3		ug/L		38	20 - 160
2-Chlorophenol	80.0	71.1		ug/L		89	70 - 130
2-Methylphenol	80.0	59.6		ug/L		74	70 - 130
4-Methylphenol	80.0	55.3		ug/L		69	20 - 160
2-Nitrophenol	80.0	83.8		ug/L		105	70 - 130
2,4-Dimethylphenol	80.0	74.8		ug/L		93	70 - 130
2,4-Dichlorophenol	80.0	79.3		ug/L		99	70 - 130
4-Chloro-3-methylphenol	80.0	75.1		ug/L		94	20 - 160
2,4,6-Trichlorophenol	80.0	84.9		ug/L		106	70 - 130
2,4,5-Trichlorophenol	80.0	86.3		ug/L		108	20 - 160
2,4-Dinitrotoluene	80.0	92.3		ug/L		115	70 - 130
4-Nitrophenol	160	63.4		ug/L		40	20 - 160
4,6-Dinitro-2-methylphenol	160	196		ug/L		122	20 - 160

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

Lab Sample ID: LCS 460-548149/2-A
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	160	175		ug/L		109	20 - 160
Bis(2-chloroethyl)ether	80.0	76.2		ug/L		95	70 - 130
N-Nitrosodi-n-propylamine	80.0	76.0		ug/L		95	70 - 130
Hexachloroethane	80.0	68.7		ug/L		86	20 - 160
Nitrobenzene	80.0	80.1		ug/L		100	70 - 130
Isophorone	80.0	83.4		ug/L		104	70 - 130
Naphthalene	80.0	77.1		ug/L		96	70 - 130
4-Chloroaniline	80.0	76.6		ug/L		96	20 - 160
Hexachlorobutadiene	80.0	74.4		ug/L		93	70 - 130
2-Methylnaphthalene	80.0	77.9		ug/L		97	70 - 130
Hexachlorocyclopentadiene	80.0	86.1		ug/L		108	20 - 160
2-Chloronaphthalene	80.0	84.3		ug/L		105	70 - 130
2-Nitroaniline	80.0	87.9		ug/L		110	20 - 160
Dimethyl phthalate	80.0	86.4		ug/L		108	70 - 130
Acenaphthylene	80.0	92.0		ug/L		115	70 - 130
2,6-Dinitrotoluene	80.0	89.1		ug/L		111	70 - 130
3-Nitroaniline	80.0	81.0		ug/L		101	20 - 160
Acenaphthene	80.0	78.3		ug/L		98	70 - 130
Dibenzofuran	80.0	85.7		ug/L		107	70 - 130
2,4-Dinitrophenol	160	170		ug/L		106	20 - 160
Diethyl phthalate	80.0	85.1		ug/L		106	70 - 130
4-Chlorophenyl phenyl ether	80.0	85.1		ug/L		106	70 - 130
Fluorene	80.0	86.2		ug/L		108	70 - 130
4-Nitroaniline	80.0	88.9		ug/L		111	20 - 160
N-Nitrosodiphenylamine	80.0	87.9		ug/L		110	70 - 130
4-Bromophenyl phenyl ether	80.0	87.1		ug/L		109	70 - 130
Hexachlorobenzene	80.0	85.7		ug/L		107	70 - 130
Phenanthrene	80.0	88.5		ug/L		111	70 - 130
Anthracene	80.0	89.0		ug/L		111	70 - 130
Carbazole	80.0	92.6		ug/L		116	70 - 130
Di-n-butyl phthalate	80.0	92.1		ug/L		115	70 - 130
Fluoranthene	80.0	94.2		ug/L		118	70 - 130
Pyrene	80.0	88.8		ug/L		111	70 - 130
Butyl benzyl phthalate	80.0	93.8		ug/L		117	70 - 130
Benzo[a]anthracene	80.0	93.0		ug/L		116	70 - 130
Chrysene	80.0	94.3		ug/L		118	70 - 130
Bis(2-ethylhexyl) phthalate	80.0	90.8		ug/L		113	70 - 130
Di-n-octyl phthalate	80.0	92.4		ug/L		115	70 - 130
Benzo[b]fluoranthene	80.0	94.0		ug/L		118	70 - 130
Benzo[k]fluoranthene	80.0	96.5		ug/L		121	70 - 130
Benzo[a]pyrene	80.0	96.1		ug/L		120	70 - 130
Indeno[1,2,3-cd]pyrene	80.0	104		ug/L		130	70 - 130
Dibenz(a,h)anthracene	80.0	101		ug/L		126	70 - 130
Benzo[g,h,i]perylene	80.0	97.2		ug/L		121	70 - 130
1,1'-Biphenyl	80.0	83.8		ug/L		105	70 - 130
Acetophenone	80.0	77.9		ug/L		97	70 - 130
2,2'-oxybis[1-chloropropane]	80.0	71.4		ug/L		89	70 - 130
1,2,4,5-Tetrachlorobenzene	80.0	82.1		ug/L		103	70 - 130

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

Lab Sample ID: LCS 460-548149/2-A
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548149

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
2,3,4,6-Tetrachlorophenol			80.0	87.6		ug/L		109	70 - 130		
3,3'-Dichlorobenzidine			80.0	87.7		ug/L		110	70 - 130		
Bis(2-chloroethoxy)methane			80.0	78.4		ug/L		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*98*		*30 - 130*
Phenol-d5 (Surr)	*35*		*15 - 110*
Terphenyl-d14 (Surr)	*100*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*112*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*52*		*15 - 110*
2-Fluorobiphenyl	*100*		*30 - 130*

Lab Sample ID: LCS 460-548149/3-A
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548149

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzaldehyde			160	154		ug/L		96	20 - 160		
Caprolactam			160	45.1		ug/L		28	20 - 160		
Atrazine			160	179		ug/L		112	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*99*		*30 - 130*
Phenol-d5 (Surr)	*32*		*15 - 110*
Terphenyl-d14 (Surr)	*103*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*106*		*15 - 110*
2-Fluorophenol (Surr)	*48*		*15 - 110*
2-Fluorobiphenyl	*95*		*30 - 130*

Lab Sample ID: 460-163302-L-21-A MS
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Phenol	0.30	U	83.3	25.0		ug/L		30	20 - 160		
2-Chlorophenol	0.38	U	83.3	61.0		ug/L		73	70 - 130		
2-Methylphenol	0.26	U F1	83.3	51.0	F1	ug/L		61	70 - 130		
4-Methylphenol	0.24	U	83.3	47.7		ug/L		57	20 - 160		
2-Nitrophenol	0.76	U	83.3	73.9		ug/L		89	70 - 130		
2,4-Dimethylphenol	0.24	U	83.3	65.6		ug/L		79	70 - 130		
2,4-Dichlorophenol	0.43	U	83.3	70.8		ug/L		85	70 - 130		
4-Chloro-3-methylphenol	0.59	U	83.3	69.6		ug/L		84	20 - 160		
2,4,6-Trichlorophenol	0.31	U	83.3	73.1		ug/L		88	20 - 160		
2,4,5-Trichlorophenol	0.28	U	83.3	73.9		ug/L		89	20 - 160		
2,4-Dinitrotoluene	1.0	U	83.3	81.3		ug/L		98	70 - 130		
4-Nitrophenol	0.70	U	167	54.9		ug/L		33	20 - 160		
4,6-Dinitro-2-methylphenol	14	U	167	168		ug/L		101	20 - 160		
Pentachlorophenol	1.5	U	167	141		ug/L		84	20 - 160		

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

Lab Sample ID: 460-163302-L-21-A MS
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	0.30	U	83.3	64.1		ug/L		77	70 - 130
N-Nitrosodi-n-propylamine	0.44	U	83.3	66.6		ug/L		80	70 - 130
Hexachloroethane	1.2	U	83.3	68.9		ug/L		83	20 - 160
Nitrobenzene	0.58	U	83.3	66.4		ug/L		80	70 - 130
Isophorone	0.81	U	83.3	73.6		ug/L		88	70 - 130
Naphthalene	5.0	J	83.3	75.0		ug/L		84	70 - 130
4-Chloroaniline	1.9	U	83.3	55.3		ug/L		66	20 - 160
Hexachlorobutadiene	0.80	U	83.3	69.5		ug/L		83	70 - 130
2-Methylnaphthalene	1.1	U	83.3	71.4		ug/L		86	70 - 130
Hexachlorocyclopentadiene	1.8	U	83.3	77.2		ug/L		93	20 - 160
2-Chloronaphthalene	1.2	U	83.3	72.7		ug/L		87	70 - 130
2-Nitroaniline	0.48	U	83.3	71.1		ug/L		85	20 - 160
Dimethyl phthalate	0.78	U	83.3	75.3		ug/L		90	70 - 130
Acenaphthylene	0.84	U	83.3	79.9		ug/L		96	70 - 130
2,6-Dinitrotoluene	0.40	U	83.3	76.8		ug/L		92	70 - 130
3-Nitroaniline	0.98	U F1	83.3	15.1	F1	ug/L		18	20 - 160
Acenaphthene	1.1	U	83.3	66.8		ug/L		80	70 - 130
Dibenzofuran	1.1	U	83.3	74.6		ug/L		90	70 - 130
2,4-Dinitrophenol	15	U	167	147		ug/L		88	20 - 160
Diethyl phthalate	1.0	U	83.3	76.1		ug/L		91	70 - 130
4-Chlorophenyl phenyl ether	1.3	U	83.3	73.6		ug/L		88	70 - 130
Fluorene	0.93	U	83.3	74.7		ug/L		90	70 - 130
4-Nitroaniline	0.55	U	83.3	61.1		ug/L		73	20 - 160
N-Nitrosodiphenylamine	0.91	U	83.3	75.9		ug/L		91	70 - 130
4-Bromophenyl phenyl ether	0.76	U	83.3	75.7		ug/L		91	70 - 130
Hexachlorobenzene	0.40	U	83.3	76.8		ug/L		92	70 - 130
Phenanthrene	0.59	U	83.3	76.5		ug/L		92	70 - 130
Anthracene	0.65	U	83.3	77.1		ug/L		93	70 - 130
Carbazole	0.69	U	83.3	79.0		ug/L		95	70 - 130
Di-n-butyl phthalate	0.86	U	83.3	82.8		ug/L		99	70 - 130
Fluoranthene	0.86	U	83.3	81.3		ug/L		98	70 - 130
Pyrene	1.7	U	83.3	79.1		ug/L		95	70 - 130
Butyl benzyl phthalate	0.87	U	83.3	86.3		ug/L		104	70 - 130
Benzo[a]anthracene	0.60	U	83.3	79.2		ug/L		95	70 - 130
Chrysene	0.93	U	83.3	79.6		ug/L		96	70 - 130
Bis(2-ethylhexyl) phthalate	1.7	U	83.3	83.5		ug/L		100	70 - 130
Di-n-octyl phthalate	4.9	U	83.3	86.5		ug/L		104	70 - 130
Benzo[b]fluoranthene	1.2	U	83.3	79.4		ug/L		95	70 - 130
Benzo[k]fluoranthene	0.69	U	83.3	84.3		ug/L		101	70 - 130
Benzo[a]pyrene	0.41	U	83.3	83.0		ug/L		100	70 - 130
Indeno[1,2,3-cd]pyrene	1.3	U	83.3	87.0		ug/L		104	70 - 130
Dibenz(a,h)anthracene	0.73	U	83.3	84.5		ug/L		101	70 - 130
Benzo[g,h,i]perylene	1.5	U	83.3	81.5		ug/L		98	70 - 130
1,1'-Biphenyl	1.2	U	83.3	72.4		ug/L		87	70 - 130
Acetophenone	0.81	U	83.3	67.4		ug/L		81	70 - 130
Benzaldehyde	0.60	U	167	121		ug/L		72	20 - 160
Caprolactam	0.70	U	167	38.7		ug/L		23	20 - 160
Atrazine	1.4	U	167	146		ug/L		88	70 - 130

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

Lab Sample ID: 460-163302-L-21-A MS
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2'-oxybis[1-chloropropane]	0.64	U	83.3	62.4		ug/L		75	70 - 130
1,2,4,5-Tetrachlorobenzene	1.3	U	83.3	71.0		ug/L		85	70 - 130
2,3,4,6-Tetrachlorophenol	0.76	U	83.3	76.5		ug/L		92	70 - 130
3,3'-Dichlorobenzidine	1.5	U	83.3	58.2		ug/L		70	70 - 130
Bis(2-chloroethoxy)methane	0.24	U	83.3	69.3		ug/L		83	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*77*		*30 - 130*
Phenol-d5 (Surr)	*28*		*15 - 110*
Terphenyl-d14 (Surr)	*83*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*94*		*15 - 110*
2-Fluorophenol (Surr)	*43*		*15 - 110*
2-Fluorobiphenyl	*84*		*30 - 130*

Lab Sample ID: 460-163302-L-21-B MSD
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	0.30	U	83.3	27.8		ug/L		33	20 - 160	11	20
2-Chlorophenol	0.38	U	83.3	63.7		ug/L		76	70 - 130	4	20
2-Methylphenol	0.26	U F1	83.3	55.1	F1	ug/L		66	70 - 130	8	20
4-Methylphenol	0.24	U	83.3	51.3		ug/L		62	20 - 160	7	20
2-Nitrophenol	0.76	U	83.3	77.1		ug/L		92	70 - 130	4	20
2,4-Dimethylphenol	0.24	U	83.3	70.7		ug/L		85	70 - 130	7	20
2,4-Dichlorophenol	0.43	U	83.3	75.5		ug/L		91	70 - 130	6	20
4-Chloro-3-methylphenol	0.59	U	83.3	73.4		ug/L		88	20 - 160	5	20
2,4,6-Trichlorophenol	0.31	U	83.3	79.6		ug/L		96	20 - 160	8	20
2,4,5-Trichlorophenol	0.28	U	83.3	79.5		ug/L		95	20 - 160	7	20
2,4-Dinitrotoluene	1.0	U	83.3	88.8		ug/L		107	70 - 130	9	20
4-Nitrophenol	0.70	U	167	63.2		ug/L		38	20 - 160	14	20
4,6-Dinitro-2-methylphenol	14	U	167	174		ug/L		105	20 - 160	3	20
Pentachlorophenol	1.5	U	167	135		ug/L		81	20 - 160	4	20
Bis(2-chloroethyl)ether	0.30	U	83.3	66.5		ug/L		80	70 - 130	4	20
N-Nitrosodi-n-propylamine	0.44	U	83.3	69.9		ug/L		84	70 - 130	5	20
Hexachloroethane	1.2	U	83.3	71.1		ug/L		85	20 - 160	3	20
Nitrobenzene	0.58	U	83.3	71.1		ug/L		85	70 - 130	7	20
Isophorone	0.81	U	83.3	78.1		ug/L		94	70 - 130	6	20
Naphthalene	5.0	J	83.3	77.7		ug/L		87	70 - 130	4	20
4-Chloroaniline	1.9	U	83.3	64.2		ug/L		77	20 - 160	15	20
Hexachlorobutadiene	0.80	U	83.3	73.6		ug/L		88	70 - 130	6	20
2-Methylnaphthalene	1.1	U	83.3	75.6		ug/L		91	70 - 130	6	20
Hexachlorocyclopentadiene	1.8	U	83.3	80.9		ug/L		97	20 - 160	5	20
2-Chloronaphthalene	1.2	U	83.3	77.5		ug/L		93	70 - 130	6	20
2-Nitroaniline	0.48	U	83.3	78.5		ug/L		94	20 - 160	10	20
Dimethyl phthalate	0.78	U	83.3	81.9		ug/L		98	70 - 130	8	20
Acenaphthylene	0.84	U	83.3	85.4		ug/L		103	70 - 130	7	20
2,6-Dinitrotoluene	0.40	U	83.3	82.7		ug/L		99	70 - 130	7	20

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

Lab Sample ID: 460-163302-L-21-B MSD
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3-Nitroaniline	0.98	U F1	83.3	15.6	F1	ug/L		19	20 - 160	3	20
Acenaphthene	1.1	U	83.3	71.7		ug/L		86	70 - 130	7	20
Dibenzofuran	1.1	U	83.3	79.9		ug/L		96	70 - 130	7	20
2,4-Dinitrophenol	15	U	167	160		ug/L		96	20 - 160	8	20
Diethyl phthalate	1.0	U	83.3	82.8		ug/L		99	70 - 130	8	20
4-Chlorophenyl phenyl ether	1.3	U	83.3	80.4		ug/L		96	70 - 130	9	20
Fluorene	0.93	U	83.3	80.7		ug/L		97	70 - 130	8	20
4-Nitroaniline	0.55	U	83.3	67.8		ug/L		81	20 - 160	10	20
N-Nitrosodiphenylamine	0.91	U	83.3	83.6		ug/L		100	70 - 130	10	20
4-Bromophenyl phenyl ether	0.76	U	83.3	81.5		ug/L		98	70 - 130	7	20
Hexachlorobenzene	0.40	U	83.3	81.5		ug/L		98	70 - 130	6	20
Phenanthrene	0.59	U	83.3	82.3		ug/L		99	70 - 130	7	20
Anthracene	0.65	U	83.3	82.5		ug/L		99	70 - 130	7	20
Carbazole	0.69	U	83.3	86.0		ug/L		103	70 - 130	8	20
Di-n-butyl phthalate	0.86	U	83.3	89.7		ug/L		108	70 - 130	8	20
Fluoranthene	0.86	U	83.3	88.5		ug/L		106	70 - 130	9	20
Pyrene	1.7	U	83.3	85.8		ug/L		103	70 - 130	8	20
Butyl benzyl phthalate	0.87	U	83.3	92.9		ug/L		111	70 - 130	7	20
Benzo[a]anthracene	0.60	U	83.3	87.9		ug/L		105	70 - 130	10	20
Chrysene	0.93	U	83.3	86.8		ug/L		104	70 - 130	9	20
Bis(2-ethylhexyl) phthalate	1.7	U	83.3	90.7		ug/L		109	70 - 130	8	20
Di-n-octyl phthalate	4.9	U	83.3	95.8		ug/L		115	70 - 130	10	20
Benzo[b]fluoranthene	1.2	U	83.3	91.3		ug/L		110	70 - 130	14	20
Benzo[k]fluoranthene	0.69	U	83.3	90.5		ug/L		109	70 - 130	7	20
Benzo[a]pyrene	0.41	U	83.3	91.4		ug/L		110	70 - 130	10	20
Indeno[1,2,3-cd]pyrene	1.3	U	83.3	94.9		ug/L		114	70 - 130	9	20
Dibenz(a,h)anthracene	0.73	U	83.3	95.6		ug/L		115	70 - 130	12	20
Benzo[g,h,i]perylene	1.5	U	83.3	89.5		ug/L		107	70 - 130	9	20
1,1'-Biphenyl	1.2	U	83.3	77.1		ug/L		93	70 - 130	6	20
Acetophenone	0.81	U	83.3	71.2		ug/L		85	70 - 130	6	20
Benzaldehyde	0.60	U	167	120		ug/L		72	20 - 160	1	20
Caprolactam	0.70	U	167	45.3		ug/L		27	20 - 160	16	20
Atrazine	1.4	U	167	155		ug/L		93	70 - 130	6	20
2,2'-oxybis[1-chloropropane]	0.64	U	83.3	63.6		ug/L		76	70 - 130	2	20
1,2,4,5-Tetrachlorobenzene	1.3	U	83.3	77.5		ug/L		93	70 - 130	9	20
2,3,4,6-Tetrachlorophenol	0.76	U	83.3	80.9		ug/L		97	70 - 130	6	20
3,3'-Dichlorobenzidine	1.5	U	83.3	63.4		ug/L		76	70 - 130	9	20
Bis(2-chloroethoxy)methane	0.24	U	83.3	73.1		ug/L		88	70 - 130	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*79*		*30 - 130*
Phenol-d5 (Surr)	*29*		*15 - 110*
Terphenyl-d14 (Surr)	*89*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*97*		*15 - 110*
2-Fluorophenol (Surr)	*44*		*15 - 110*
2-Fluorobiphenyl	*87*		*30 - 130*

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

Lab Sample ID: MB 460-547375/1-A
Matrix: Water
Analysis Batch: 547568

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547375

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/25/18 10:05	08/26/18 17:05	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/25/18 10:05	08/26/18 17:05	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/25/18 10:05	08/26/18 17:05	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/25/18 10:05	08/26/18 17:05	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/25/18 10:05	08/26/18 17:05	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/25/18 10:05	08/26/18 17:05	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/25/18 10:05	08/26/18 17:05	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/25/18 10:05	08/26/18 17:05	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/25/18 10:05	08/26/18 17:05	1

Lab Sample ID: LCS 460-547375/6-A
Matrix: Water
Analysis Batch: 547568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547375

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.790		ug/L		99	70 - 130
Benzo[a]pyrene	0.800	0.846		ug/L		106	70 - 130
Benzo[b]fluoranthene	0.800	0.863		ug/L		108	70 - 130
Bis(2-chloroethyl)ether	0.800	0.878		ug/L		110	70 - 130
Dibenz(a,h)anthracene	0.800	0.861		ug/L		108	70 - 130
Hexachlorobenzene	0.800	0.970		ug/L		121	70 - 130
Indeno[1,2,3-cd]pyrene	0.800	0.640		ug/L		80	70 - 130
N-Nitrosodimethylamine	0.800	0.417		ug/L		52	20 - 160
Pentachlorophenol	1.60	0.701		ug/L		44	20 - 160

Lab Sample ID: LCSD 460-547375/7-A
Matrix: Water
Analysis Batch: 547568

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 547375

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.704		ug/L		88	70 - 130	12	20
Benzo[a]pyrene	0.800	0.794		ug/L		99	70 - 130	6	20
Benzo[b]fluoranthene	0.800	0.793		ug/L		99	70 - 130	8	20
Bis(2-chloroethyl)ether	0.800	0.796		ug/L		99	70 - 130	10	20
Dibenz(a,h)anthracene	0.800	0.714		ug/L		89	70 - 130	19	20
Hexachlorobenzene	0.800	0.948		ug/L		119	70 - 130	2	20
Indeno[1,2,3-cd]pyrene	0.800	0.645		ug/L		81	70 - 130	1	20
N-Nitrosodimethylamine	0.800	0.434		ug/L		54	20 - 160	4	20
Pentachlorophenol	1.60	0.665		ug/L		42	20 - 160	5	20

Lab Sample ID: MB 460-548149/1-A
Matrix: Water
Analysis Batch: 548270

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/28/18 20:11	08/29/18 08:48	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/28/18 20:11	08/29/18 08:48	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/28/18 20:11	08/29/18 08:48	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/28/18 20:11	08/29/18 08:48	1

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

Lab Sample ID: MB 460-548149/1-A
Matrix: Water
Analysis Batch: 548270

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/28/18 20:11	08/29/18 08:48	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/28/18 20:11	08/29/18 08:48	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/28/18 20:11	08/29/18 08:48	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/28/18 20:11	08/29/18 08:48	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/28/18 20:11	08/29/18 08:48	1

Lab Sample ID: LCS 460-548149/4-A
Matrix: Water
Analysis Batch: 548270

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.674		ug/L		84	70 - 130
Benzo[a]pyrene	0.800	0.758		ug/L		95	70 - 130
Benzo[b]fluoranthene	0.800	0.667		ug/L		83	70 - 130
Bis(2-chloroethyl)ether	0.800	0.763		ug/L		95	70 - 130
Dibenz(a,h)anthracene	0.800	1.09	*	ug/L		136	70 - 130
Hexachlorobenzene	0.800	0.839		ug/L		105	70 - 130
Indeno[1,2,3-cd]pyrene	0.800	0.825		ug/L		103	70 - 130
N-Nitrosodimethylamine	0.800	0.458		ug/L		57	20 - 160
Pentachlorophenol	1.60	2.20		ug/L		137	20 - 160

Lab Sample ID: LCSD 460-548149/5-A
Matrix: Water
Analysis Batch: 548270

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.773		ug/L		97	70 - 130	14	20
Benzo[a]pyrene	0.800	0.848		ug/L		106	70 - 130	11	20
Benzo[b]fluoranthene	0.800	0.785		ug/L		98	70 - 130	16	20
Bis(2-chloroethyl)ether	0.800	0.828		ug/L		103	70 - 130	8	20
Dibenz(a,h)anthracene	0.800	1.17	*	ug/L		147	70 - 130	8	20
Hexachlorobenzene	0.800	0.904		ug/L		113	70 - 130	7	20
Indeno[1,2,3-cd]pyrene	0.800	0.931		ug/L		116	70 - 130	12	20
N-Nitrosodimethylamine	0.800	0.454		ug/L		57	20 - 160	1	20
Pentachlorophenol	1.60	2.49		ug/L		155	20 - 160	12	20

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 460-547378/1-A
Matrix: Water
Analysis Batch: 547494

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547378

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/25/18 10:18	08/26/18 00:16	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*29*		*10 - 150*	*08/25/18 10:18*	*08/26/18 00:16*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: LCS 460-547378/2-A
Matrix: Water
Analysis Batch: 547494

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547378

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			1.60	1.93		ug/L		121	10 - 200		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*32*		*10 - 200*

Lab Sample ID: LCSD 460-547378/3-A
Matrix: Water
Analysis Batch: 547494

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 547378

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			1.60	1.99		ug/L		125	10 - 200	3	50

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,4-Dioxane-d8	*32*		*10 - 200*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 460-547236/1-A
Matrix: Water
Analysis Batch: 547439

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547236

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 21:34	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 18:58	08/25/18 21:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*30 - 150*	*08/24/18 18:58*	*08/25/18 21:34*	*1*
Tetrachloro-m-xylene	*75*		*30 - 150*	*08/24/18 18:58*	*08/25/18 21:34*	*1*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*08/24/18 18:58*	*08/25/18 21:34*	*1*
DCB Decachlorobiphenyl	*86*		*30 - 150*	*08/24/18 18:58*	*08/25/18 21:34*	*1*

Lab Sample ID: LCS 460-547236/2-A
Matrix: Water
Analysis Batch: 547439

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547236

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	3.22		ug/L		81	40 - 140		
PCB-1016			4.00	3.28		ug/L		82	40 - 140		
PCB-1260			4.00	3.50		ug/L		87	40 - 140		

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 460-547236/2-A
Matrix: Water
Analysis Batch: 547439

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547236

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1260			4.00	3.60		ug/L		90	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*73*		*30 - 150*
Tetrachloro-m-xylene	*72*		*30 - 150*
DCB Decachlorobiphenyl	*82*		*30 - 150*
DCB Decachlorobiphenyl	*82*		*30 - 150*

Lab Sample ID: 460-163149-O-2-A MS
Matrix: Water
Analysis Batch: 547439

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 547236

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	0.12	U	4.08	2.83		ug/L		69	40 - 140		
PCB-1016	0.12	U	4.08	2.93		ug/L		72	40 - 140		
PCB-1260	0.11	U	4.08	3.11		ug/L		76	40 - 140		
PCB-1260	0.11	U	4.08	3.29		ug/L		81	40 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*61*		*30 - 150*
Tetrachloro-m-xylene	*61*		*30 - 150*
DCB Decachlorobiphenyl	*70*		*30 - 150*
DCB Decachlorobiphenyl	*72*		*30 - 150*

Lab Sample ID: 460-163149-O-2-B MSD
Matrix: Water
Analysis Batch: 547439

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 547236

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.12	U	4.08	2.92		ug/L		71	40 - 140	3	20
PCB-1016	0.12	U	4.08	3.18		ug/L		78	40 - 140	8	20
PCB-1260	0.11	U	4.08	3.21		ug/L		79	40 - 140	3	20
PCB-1260	0.11	U	4.08	3.47		ug/L		85	40 - 140	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*63*		*30 - 150*
Tetrachloro-m-xylene	*65*		*30 - 150*
DCB Decachlorobiphenyl	*72*		*30 - 150*
DCB Decachlorobiphenyl	*76*		*30 - 150*

Lab Sample ID: MB 460-547238/1-A
Matrix: Water
Analysis Batch: 547434

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547238

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/24/18 19:08	08/25/18 19:34	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/24/18 19:08	08/25/18 19:34	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 460-547238/1-A
Matrix: Water
Analysis Batch: 547434

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547238

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1221	0.12	U	0.40	0.12	ug/L		08/24/18 19:08	08/25/18 19:34	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/24/18 19:08	08/25/18 19:34	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/24/18 19:08	08/25/18 19:34	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/24/18 19:08	08/25/18 19:34	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/24/18 19:08	08/25/18 19:34	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/24/18 19:08	08/25/18 19:34	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/24/18 19:08	08/25/18 19:34	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/24/18 19:08	08/25/18 19:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*30 - 150*	*08/24/18 19:08*	*08/25/18 19:34*	*1*
Tetrachloro-m-xylene	*80*		*30 - 150*	*08/24/18 19:08*	*08/25/18 19:34*	*1*
DCB Decachlorobiphenyl	*91*		*30 - 150*	*08/24/18 19:08*	*08/25/18 19:34*	*1*
DCB Decachlorobiphenyl	*88*		*30 - 150*	*08/24/18 19:08*	*08/25/18 19:34*	*1*

Lab Sample ID: LCS 460-547238/2-A
Matrix: Water
Analysis Batch: 547434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547238

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	3.93		ug/L		98	40 - 140		
PCB-1016			4.00	4.16		ug/L		104	40 - 140		
PCB-1260			4.00	4.04		ug/L		101	40 - 140		
PCB-1260			4.00	4.00		ug/L		100	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*84*		*30 - 150*
Tetrachloro-m-xylene	*88*		*30 - 150*
DCB Decachlorobiphenyl	*93*		*30 - 150*
DCB Decachlorobiphenyl	*95*		*30 - 150*

Lab Sample ID: LCSD 460-547238/3-A
Matrix: Water
Analysis Batch: 547434

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 547238

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			4.00	3.94		ug/L		98	40 - 140	0	20
PCB-1016			4.00	4.04		ug/L		101	40 - 140	3	20
PCB-1260			4.00	4.07		ug/L		102	40 - 140	1	20
PCB-1260			4.00	3.85		ug/L		96	40 - 140	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*84*		*30 - 150*
Tetrachloro-m-xylene	*85*		*30 - 150*
DCB Decachlorobiphenyl	*95*		*30 - 150*
DCB Decachlorobiphenyl	*91*		*30 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 460-547542/3
Matrix: Water
Analysis Batch: 547542

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/26/18 10:11	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/26/18 10:11	1

Lab Sample ID: LCS 460-547542/5
Matrix: Water
Analysis Batch: 547542

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.425		mg/L		95	90 - 110
Sulfate	7.50	7.337		mg/L		98	90 - 110

Lab Sample ID: LCSD 460-547542/6
Matrix: Water
Analysis Batch: 547542

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.50	1.429		mg/L		95	90 - 110	0	15
Sulfate	7.50	7.344		mg/L		98	90 - 110	0	15

Lab Sample ID: 460-163188-12 MS
Matrix: Water
Analysis Batch: 547542

Client Sample ID: OB-21-082218
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.66		1.50	3.211		mg/L		103	90 - 110
Sulfate	7.63		7.50	15.33		mg/L		103	90 - 110

Lab Sample ID: 460-163188-12 MSD
Matrix: Water
Analysis Batch: 547542

Client Sample ID: OB-21-082218
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.66		1.50	3.142		mg/L		99	90 - 110	2	15
Sulfate	7.63		7.50	15.49		mg/L		105	90 - 110	1	15

Lab Sample ID: 460-163188-13 DU
Matrix: Water
Analysis Batch: 547542

Client Sample ID: OB-27-082218
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	2.04		2.050		mg/L		0.8	15
Sulfate	0.33	U	0.33	U	mg/L		NC	15

Lab Sample ID: MB 460-547688/3
Matrix: Water
Analysis Batch: 547688

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/27/18 04:08	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 460-547688/3
Matrix: Water
Analysis Batch: 547688

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.33	U	0.60	0.33	mg/L			08/27/18 04:08	1

Lab Sample ID: LCS 460-547688/5
Matrix: Water
Analysis Batch: 547688

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.457		mg/L		97	90 - 110
Sulfate	7.50	7.537		mg/L		100	90 - 110

Lab Sample ID: LCSD 460-547688/6
Matrix: Water
Analysis Batch: 547688

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.50	1.456		mg/L		97	90 - 110	0	15
Sulfate	7.50	7.498		mg/L		100	90 - 110	1	15

Method: 9056A - Anions, Ion Chromatography - DL

Lab Sample ID: 460-163188-12 DU
Matrix: Water
Analysis Batch: 547688

Client Sample ID: OB-21-082218
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	1.66		1.653		mg/L		0.6	15
Sulfate - DL	7.63		7.587		mg/L		0.6	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: LCS 460-547720/2-A
Matrix: Water
Analysis Batch: 547812

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547720

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.00	5.02		ug/L		100	80 - 120
Arsenic	10.0	10.90		ug/L		109	80 - 120
Barium	10.0	9.75		ug/L		97	80 - 120
Beryllium	5.00	5.04		ug/L		101	80 - 120
Cadmium	5.00	4.83		ug/L		97	80 - 120
Cobalt	5.00	4.88		ug/L		98	80 - 120
Chromium	10.0	9.46		ug/L		95	80 - 120
Copper	10.0	9.20		ug/L		92	80 - 120
Manganese	50.0	49.84		ug/L		100	80 - 120
Nickel	10.0	9.86		ug/L		99	80 - 120
Lead	5.00	4.99		ug/L		100	80 - 120
Antimony	5.00	4.46		ug/L		89	80 - 120
Selenium	10.0	10.55		ug/L		106	80 - 120
Vanadium	10.0	9.57		ug/L		96	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-547720/2-A
Matrix: Water
Analysis Batch: 547812

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547720

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	50.0	50.96		ug/L		102	80 - 120
Aluminum	500	490.8		ug/L		98	80 - 120
Sodium	500	447.3		ug/L		89	80 - 120
Magnesium	500	474.4		ug/L		95	80 - 120
Potassium	500	502.7		ug/L		101	80 - 120
Calcium	500	522.0		ug/L		104	80 - 120
Iron	500	494.7		ug/L		99	80 - 120
Thallium	4.00	3.89		ug/L		97	80 - 120

Lab Sample ID: MB 460-548334/1-A ^2
Matrix: Water
Analysis Batch: 548421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548334

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/29/18 10:35	08/29/18 20:56	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/29/18 10:35	08/29/18 20:56	2
Barium	1.1	U	4.0	1.1	ug/L		08/29/18 10:35	08/29/18 20:56	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/29/18 10:35	08/29/18 20:56	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/29/18 10:35	08/29/18 20:56	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 20:56	2
Chromium	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 20:56	2
Copper	1.9	U	4.0	1.9	ug/L		08/29/18 10:35	08/29/18 20:56	2
Manganese	2.7	U	8.0	2.7	ug/L		08/29/18 10:35	08/29/18 20:56	2
Nickel	1.3	U	4.0	1.3	ug/L		08/29/18 10:35	08/29/18 20:56	2
Lead	0.37	U	1.2	0.37	ug/L		08/29/18 10:35	08/29/18 20:56	2
Antimony	0.62	U	2.0	0.62	ug/L		08/29/18 10:35	08/29/18 20:56	2
Selenium	0.69	U	10.0	0.69	ug/L		08/29/18 10:35	08/29/18 20:56	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/29/18 10:35	08/29/18 20:56	2
Zinc	5.4	U	16.0	5.4	ug/L		08/29/18 10:35	08/29/18 20:56	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/29/18 10:35	08/29/18 20:56	2
Sodium	75.7	U	200	75.7	ug/L		08/29/18 10:35	08/29/18 20:56	2
Magnesium	65.7	U	200	65.7	ug/L		08/29/18 10:35	08/29/18 20:56	2
Potassium	64.9	U	200	64.9	ug/L		08/29/18 10:35	08/29/18 20:56	2
Calcium	67.6	U	200	67.6	ug/L		08/29/18 10:35	08/29/18 20:56	2
Iron	45.7	U	120	45.7	ug/L		08/29/18 10:35	08/29/18 20:56	2
Thallium	0.24	U	0.80	0.24	ug/L		08/29/18 10:35	08/29/18 20:56	2

Lab Sample ID: LCS 460-548334/2-A ^2
Matrix: Water
Analysis Batch: 548421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	25.05		ug/L		100	80 - 120
Arsenic	50.0	52.26		ug/L		105	80 - 120
Barium	50.0	49.14		ug/L		98	80 - 120
Beryllium	25.0	23.10		ug/L		92	80 - 120
Cadmium	25.0	24.30		ug/L		97	80 - 120
Cobalt	25.0	25.42		ug/L		102	80 - 120
Chromium	50.0	50.77		ug/L		102	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-548334/2-A ^2
Matrix: Water
Analysis Batch: 548421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	50.0	50.39		ug/L		101	80 - 120
Manganese	250	250.9		ug/L		100	80 - 120
Nickel	50.0	50.50		ug/L		101	80 - 120
Lead	25.0	25.12		ug/L		100	80 - 120
Antimony	25.0	24.54		ug/L		98	80 - 120
Selenium	50.0	52.70		ug/L		105	80 - 120
Vanadium	50.0	49.80		ug/L		100	80 - 120
Zinc	250	249.6		ug/L		100	80 - 120
Aluminum	2500	2489		ug/L		100	80 - 120
Sodium	2500	2690		ug/L		108	80 - 120
Magnesium	2500	2619		ug/L		105	80 - 120
Potassium	2500	2512		ug/L		100	80 - 120
Calcium	2500	2725		ug/L		109	80 - 120
Iron	2500	2515		ug/L		101	80 - 120
Thallium	20.0	20.74		ug/L		104	80 - 120

Lab Sample ID: 460-163188-2 MS
Matrix: Water
Analysis Batch: 548421

Client Sample ID: OB-13-082218
Prep Type: Total/NA
Prep Batch: 548334

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	25.0	25.12		ug/L		100	75 - 125
Arsenic	0.77	U	50.0	43.67		ug/L		87	75 - 125
Barium	4.8		50.0	53.13		ug/L		97	75 - 125
Beryllium	0.26	U	25.0	25.81		ug/L		103	75 - 125
Cadmium	0.61	U	25.0	24.29		ug/L		97	75 - 125
Cobalt	1.3	U	25.0	24.74		ug/L		99	75 - 125
Chromium	1.3	U	50.0	49.34		ug/L		99	75 - 125
Copper	1.9	U	50.0	49.32		ug/L		99	75 - 125
Manganese	2.7	U	250	245.5		ug/L		98	75 - 125
Nickel	1.3	U	50.0	49.69		ug/L		99	75 - 125
Lead	0.37	U	25.0	24.69		ug/L		99	75 - 125
Antimony	0.62	U	25.0	24.90		ug/L		100	75 - 125
Selenium	0.69	U	50.0	45.18		ug/L		90	75 - 125
Vanadium	1.2	U	50.0	48.61		ug/L		97	75 - 125
Zinc	5.4	U	250	251.7		ug/L		101	75 - 125
Aluminum	43.1		2500	2439		ug/L		96	75 - 125
Sodium	3590		2500	6126		ug/L		102	75 - 125
Magnesium	2890		2500	5371		ug/L		99	75 - 125
Potassium	1300		2500	3676		ug/L		95	75 - 125
Calcium	7410		2500	9620		ug/L		89	75 - 125
Iron	45.7	U	2500	2458		ug/L		98	75 - 125
Thallium	0.24	U	20.0	20.29		ug/L		101	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163188-2 DU
Matrix: Water
Analysis Batch: 548421

Client Sample ID: OB-13-082218
Prep Type: Total/NA
Prep Batch: 548334

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	0.77	U	0.77	U	ug/L		NC	20
Barium	4.8		4.71		ug/L		2	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	1.3	U	1.3	U	ug/L		NC	20
Chromium	1.3	U	1.3	U	ug/L		NC	20
Copper	1.9	U	1.9	U	ug/L		NC	20
Manganese	2.7	U	2.7	U	ug/L		NC	20
Nickel	1.3	U	1.3	U	ug/L		NC	20
Lead	0.37	U	0.37	U	ug/L		NC	20
Antimony	0.62	U	0.62	U	ug/L		NC	20
Selenium	0.69	U	0.69	U	ug/L		NC	20
Vanadium	1.2	U	1.2	U	ug/L		NC	20
Zinc	5.4	U	5.4	U	ug/L		NC	20
Aluminum	43.1		40.25		ug/L		7	20
Sodium	3590		3497		ug/L		3	20
Magnesium	2890		2826		ug/L		2	20
Potassium	1300		1249		ug/L		4	20
Calcium	7410		7139		ug/L		4	20
Iron	45.7	U	45.7	U	ug/L		NC	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Lab Sample ID: MB 460-547690/1-C
Matrix: Water
Analysis Batch: 547812

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 547720

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.68	U	1.0	0.68	ug/L		08/27/18 09:32	08/27/18 15:10	1
Arsenic	0.38	U	1.0	0.38	ug/L		08/27/18 09:32	08/27/18 15:10	1
Barium	0.57	U	2.0	0.57	ug/L		08/27/18 09:32	08/27/18 15:10	1
Beryllium	0.13	U	0.40	0.13	ug/L		08/27/18 09:32	08/27/18 15:10	1
Cadmium	0.31	U	1.0	0.31	ug/L		08/27/18 09:32	08/27/18 15:10	1
Cobalt	0.64	U	2.0	0.64	ug/L		08/27/18 09:32	08/27/18 15:10	1
Chromium	0.66	U	2.0	0.66	ug/L		08/27/18 09:32	08/27/18 15:10	1
Copper	0.95	U	2.0	0.95	ug/L		08/27/18 09:32	08/27/18 15:10	1
Manganese	1.3	U	4.0	1.3	ug/L		08/27/18 09:32	08/27/18 15:10	1
Nickel	0.65	U	2.0	0.65	ug/L		08/27/18 09:32	08/27/18 15:10	1
Lead	0.19	U	0.60	0.19	ug/L		08/27/18 09:32	08/27/18 15:10	1
Antimony	0.31	U	1.0	0.31	ug/L		08/27/18 09:32	08/27/18 15:10	1
Selenium	0.35	U	5.0	0.35	ug/L		08/27/18 09:32	08/27/18 15:10	1
Vanadium	0.59	U	2.0	0.59	ug/L		08/27/18 09:32	08/27/18 15:10	1
Zinc	2.7	U	8.0	2.7	ug/L		08/27/18 09:32	08/27/18 15:10	1
Aluminum	7.5	U	20.0	7.5	ug/L		08/27/18 09:32	08/27/18 15:10	1
Sodium	37.9	U	100	37.9	ug/L		08/27/18 09:32	08/27/18 15:10	1
Magnesium	32.9	U	100	32.9	ug/L		08/27/18 09:32	08/27/18 15:10	1
Potassium	32.5	U	100	32.5	ug/L		08/27/18 09:32	08/27/18 15:10	1
Calcium	33.8	U	100	33.8	ug/L		08/27/18 09:32	08/27/18 15:10	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-547690/1-C
Matrix: Water
Analysis Batch: 547812

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 547720

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	22.9	U	60.0	22.9	ug/L		08/27/18 09:32	08/27/18 15:10	1
Thallium	0.12	U	0.40	0.12	ug/L		08/27/18 09:32	08/27/18 15:10	1

Lab Sample ID: 460-163188-2 MS
Matrix: Water
Analysis Batch: 547812

Client Sample ID: OB-13-082218
Prep Type: Dissolved
Prep Batch: 547720

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	10.0	9.76		ug/L		98	75 - 125
Arsenic	0.77	U	20.0	20.31		ug/L		102	75 - 125
Barium	4.2		20.0	24.64		ug/L		102	75 - 125
Beryllium	0.26	U	10.0	10.23		ug/L		102	75 - 125
Cadmium	0.61	U	10.0	9.68		ug/L		97	75 - 125
Cobalt	1.3	U	10.0	9.62		ug/L		96	75 - 125
Chromium	1.3	U	20.0	18.66		ug/L		93	75 - 125
Copper	1.9	U	20.0	18.66		ug/L		93	75 - 125
Manganese	2.7	U	100	100.1		ug/L		100	75 - 125
Nickel	1.3	U	20.0	19.22		ug/L		96	75 - 125
Lead	0.37	U	10.0	9.78		ug/L		98	75 - 125
Antimony	0.62	U	10.0	8.64		ug/L		86	75 - 125
Selenium	0.69	U	20.0	22.75		ug/L		114	75 - 125
Vanadium	1.2	U	20.0	19.16		ug/L		96	75 - 125
Aluminum	15.0	U	1000	963.4		ug/L		96	75 - 125
Sodium	2950		1000	3814		ug/L		87	75 - 125
Magnesium	2580		1000	3487		ug/L		90	75 - 125
Potassium	1280		1000	2251		ug/L		97	75 - 125
Calcium	7490		1000	8386	4	ug/L		89	75 - 125
Iron	45.7	U	1000	969.6		ug/L		97	75 - 125
Thallium	0.24	U	8.00	7.54		ug/L		94	75 - 125

Lab Sample ID: 460-163188-2 MS
Matrix: Water
Analysis Batch: 548676

Client Sample ID: OB-13-082218
Prep Type: Dissolved
Prep Batch: 547720

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	26.9	U	500	421.4		ug/L		84	75 - 125

Lab Sample ID: 460-163188-2 DU
Matrix: Water
Analysis Batch: 547812

Client Sample ID: OB-13-082218
Prep Type: Dissolved
Prep Batch: 547720

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	0.77	U	0.77	U	ug/L		NC	20
Barium	4.2		4.84		ug/L		14	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	1.3	U	1.3	U	ug/L		NC	20
Chromium	1.3	U	1.3	U	ug/L		NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163188-2 DU
Matrix: Water
Analysis Batch: 547812

Client Sample ID: OB-13-082218
Prep Type: Dissolved
Prep Batch: 547720

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Copper	1.9	U	1.9	U	ug/L		NC	20
Manganese	2.7	U	2.7	U	ug/L		NC	20
Nickel	1.3	U	1.3	U	ug/L		NC	20
Lead	0.37	U	0.37	U	ug/L		NC	20
Antimony	0.62	U	0.62	U	ug/L		NC	20
Selenium	0.69	U	0.69	U	ug/L		NC	20
Vanadium	1.2	U	1.2	U	ug/L		NC	20
Aluminum	15.0	U	15.0	U	ug/L		NC	20
Sodium	2950		2940		ug/L		0.2	20
Magnesium	2580		2568		ug/L		0.6	20
Potassium	1280		1265		ug/L		1	20
Calcium	7490		7425		ug/L		0.9	20
Iron	45.7	U	45.7	U	ug/L		NC	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Lab Sample ID: 460-163188-2 DU
Matrix: Water
Analysis Batch: 548676

Client Sample ID: OB-13-082218
Prep Type: Dissolved
Prep Batch: 547720

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Zinc	26.9	U	26.9	U	ug/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 460-548073/1-A
Matrix: Water
Analysis Batch: 548117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548073

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 12:51	08/28/18 15:34	1

Lab Sample ID: LCS 460-548073/2-A
Matrix: Water
Analysis Batch: 548117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.999		ug/L		100	80 - 120

Lab Sample ID: 460-163188-7 MS
Matrix: Water
Analysis Batch: 548117

Client Sample ID: OB-32-082218
Prep Type: Total/NA
Prep Batch: 548073

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	0.969		ug/L		97	75 - 125

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 460-163188-7 DU
Matrix: Water
Analysis Batch: 548117

Client Sample ID: OB-32-082218
Prep Type: Total/NA
Prep Batch: 548073

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Lab Sample ID: LCS 460-548076/2-A
Matrix: Water
Analysis Batch: 548117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548076

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.991		ug/L		99	80 - 120

Lab Sample ID: MB 460-548057/1-B
Matrix: Water
Analysis Batch: 548117

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 548076

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/28/18 13:04	08/28/18 16:39	1

Lab Sample ID: 460-163188-3 MS
Matrix: Water
Analysis Batch: 548117

Client Sample ID: OB-10-082218
Prep Type: Dissolved
Prep Batch: 548076

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	0.949		ug/L		95	75 - 125

Lab Sample ID: 460-163188-3 DU
Matrix: Water
Analysis Batch: 548117

Client Sample ID: OB-10-082218
Prep Type: Dissolved
Prep Batch: 548076

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 460-548020/1-A
Matrix: Water
Analysis Batch: 548373

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548020

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/28/18 09:25	08/29/18 12:37	1

Lab Sample ID: LCS 460-548020/2-A
Matrix: Water
Analysis Batch: 548373

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.101		mg/L		101	85 - 115

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: 460-163188-6 MS
Matrix: Water
Analysis Batch: 548373

Client Sample ID: OB-33-082218
Prep Type: Total/NA
Prep Batch: 548020

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0020	U	0.200	0.237		mg/L		119	75 - 125

Lab Sample ID: 460-163188-6 MSD
Matrix: Water
Analysis Batch: 548373

Client Sample ID: OB-33-082218
Prep Type: Total/NA
Prep Batch: 548020

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U	0.200	0.245		mg/L		123	75 - 125	3	20

Lab Sample ID: MB 460-548572/1-A
Matrix: Water
Analysis Batch: 548643

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548572

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 08:27	08/30/18 12:15	1

Lab Sample ID: LCS 460-548572/2-A
Matrix: Water
Analysis Batch: 548643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548572

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0999		mg/L		100	85 - 115

Lab Sample ID: 460-163149-H-11-B MS
Matrix: Water
Analysis Batch: 548643

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 548572

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0020	U	0.200	0.247		mg/L		124	75 - 125

Lab Sample ID: 460-163149-H-11-C MSD
Matrix: Water
Analysis Batch: 548643

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 548572

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U	0.200	0.221		mg/L		111	75 - 125	11	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 460-547451/25
Matrix: Water
Analysis Batch: 547451

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/25/18 14:16	1
Alkalinity	5.0	U	5.0	5.0	mg/L			08/25/18 14:16	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSSRM 460-547451/26
Matrix: Water
Analysis Batch: 547451

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	384	361.2		mg/L		94.1	84.9 - 114.8

Lab Sample ID: 460-163188-2 DU
Matrix: Water
Analysis Batch: 547451

Client Sample ID: OB-13-082218
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	25.7		25.41		mg/L		1	10
Alkalinity	25.7		25.41		mg/L		1	10

Lab Sample ID: MB 460-547667/2
Matrix: Water
Analysis Batch: 547667

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/26/18 07:45	1
Alkalinity	5.0	U	5.0	5.0	mg/L			08/26/18 07:45	1

Lab Sample ID: LCSSRM 460-547667/3
Matrix: Water
Analysis Batch: 547667

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	384	364.8		mg/L		95.0	84.9 - 114.8

Lab Sample ID: 460-163302-A-21 DU
Matrix: Water
Analysis Batch: 547667

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	565		555.7		mg/L		2	10
Alkalinity	565		555.7		mg/L		2	10

GC/MS VOA

Analysis Batch: 547649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	8260C	
460-163188-3	OB-10-082218	Total/NA	Water	8260C	
460-163188-4	OB-29-082218	Total/NA	Water	8260C	
460-163188-5	OB-15B-082218	Total/NA	Water	8260C	
460-163188-6	OB-33-082218	Total/NA	Water	8260C	
460-163188-7	OB-32-082218	Total/NA	Water	8260C	
460-163188-9	OB-19-082218	Total/NA	Water	8260C	
460-163188-10	OB-11R-082218	Total/NA	Water	8260C	
460-163188-11	RW-5A-082218	Total/NA	Water	8260C	
460-163188-12	OB-21-082218	Total/NA	Water	8260C	
460-163188-13	OB-27-082218	Total/NA	Water	8260C	
460-163188-15	OB-31-082218	Total/NA	Water	8260C	
460-163188-16	RW-7-082218	Total/NA	Water	8260C	
460-163188-17	TB-02-082318	Total/NA	Water	8260C	
460-163188-18	FB-03-082318	Total/NA	Water	8260C	
MB 460-547649/8	Method Blank	Total/NA	Water	8260C	
LCS 460-547649/4	Lab Control Sample	Total/NA	Water	8260C	
460-163158-A-1 MS	Matrix Spike	Total/NA	Water	8260C	
460-163158-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

Analysis Batch: 547854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	8260C SIM	
460-163188-4	OB-29-082218	Total/NA	Water	8260C SIM	
460-163188-5	OB-15B-082218	Total/NA	Water	8260C SIM	
460-163188-6	OB-33-082218	Total/NA	Water	8260C SIM	
460-163188-7	OB-32-082218	Total/NA	Water	8260C SIM	
460-163188-9	OB-19-082218	Total/NA	Water	8260C SIM	
MB 460-547854/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-547854/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-547854/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Analysis Batch: 547967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-3	OB-10-082218	Total/NA	Water	8260C SIM	
460-163188-10	OB-11R-082218	Total/NA	Water	8260C SIM	
460-163188-11	RW-5A-082218	Total/NA	Water	8260C SIM	
460-163188-12	OB-21-082218	Total/NA	Water	8260C SIM	
460-163188-13	OB-27-082218	Total/NA	Water	8260C SIM	
460-163188-14	OB-30B-082218	Total/NA	Water	8260C SIM	
460-163188-15	OB-31-082218	Total/NA	Water	8260C SIM	
460-163188-16	RW-7-082218	Total/NA	Water	8260C SIM	
460-163188-18	FB-03-082318	Total/NA	Water	8260C SIM	
MB 460-547967/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-547967/4	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-547967/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Analysis Batch: 548123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-14	OB-30B-082218	Total/NA	Water	8260C	
MB 460-548123/8	Method Blank	Total/NA	Water	8260C	

GC/MS VOA (Continued)

Analysis Batch: 548123 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-548123/4	Lab Control Sample	Total/NA	Water	8260C	
460-163302-B-5 MS	Matrix Spike	Total/NA	Water	8260C	
460-163302-B-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

Analysis Batch: 548240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-17	TB-02-082318	Total/NA	Water	8260C SIM	
MB 460-548240/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-548240/4	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-548240/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

GC/MS Semi VOA

Prep Batch: 547375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	3510C	
460-163188-3	OB-10-082218	Total/NA	Water	3510C	
460-163188-4	OB-29-082218	Total/NA	Water	3510C	
460-163188-5	OB-15B-082218	Total/NA	Water	3510C	
460-163188-6	OB-33-082218	Total/NA	Water	3510C	
460-163188-7	OB-32-082218	Total/NA	Water	3510C	
460-163188-11	RW-5A-082218	Total/NA	Water	3510C	
460-163188-12	OB-21-082218	Total/NA	Water	3510C	
460-163188-15	OB-31-082218	Total/NA	Water	3510C	
460-163188-16	RW-7-082218	Total/NA	Water	3510C	
460-163188-18	FB-03-082318	Total/NA	Water	3510C	
MB 460-547375/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-547375/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-547375/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-547375/6-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-547375/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 460-547375/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 460-547375/7-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 547378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	3510C	
460-163188-3	OB-10-082218	Total/NA	Water	3510C	
460-163188-4	OB-29-082218	Total/NA	Water	3510C	
460-163188-5	OB-15B-082218	Total/NA	Water	3510C	
460-163188-6	OB-33-082218	Total/NA	Water	3510C	
460-163188-7	OB-32-082218	Total/NA	Water	3510C	
460-163188-9	OB-19-082218	Total/NA	Water	3510C	
460-163188-10	OB-11R-082218	Total/NA	Water	3510C	
460-163188-11	RW-5A-082218	Total/NA	Water	3510C	
460-163188-12	OB-21-082218	Total/NA	Water	3510C	
460-163188-13	OB-27-082218	Total/NA	Water	3510C	
460-163188-14	OB-30B-082218	Total/NA	Water	3510C	
460-163188-15	OB-31-082218	Total/NA	Water	3510C	
460-163188-16	RW-7-082218	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 547378 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-18	FB-03-082318	Total/NA	Water	3510C	
MB 460-547378/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-547378/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-547378/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 547494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-3	OB-10-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-4	OB-29-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-5	OB-15B-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-6	OB-33-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-7	OB-32-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-9	OB-19-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-10	OB-11R-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-11	RW-5A-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-12	OB-21-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-13	OB-27-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-14	OB-30B-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-15	OB-31-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-16	RW-7-082218	Total/NA	Water	8270D SIM ID	547378
460-163188-18	FB-03-082318	Total/NA	Water	8270D SIM ID	547378
MB 460-547378/1-A	Method Blank	Total/NA	Water	8270D SIM ID	547378
LCS 460-547378/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	547378
LCSD 460-547378/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM ID	547378

Analysis Batch: 547548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	8270D	547375
460-163188-3	OB-10-082218	Total/NA	Water	8270D	547375
460-163188-4	OB-29-082218	Total/NA	Water	8270D	547375
460-163188-5	OB-15B-082218	Total/NA	Water	8270D	547375
460-163188-6	OB-33-082218	Total/NA	Water	8270D	547375
460-163188-7	OB-32-082218	Total/NA	Water	8270D	547375
460-163188-11	RW-5A-082218	Total/NA	Water	8270D	547375
460-163188-12	OB-21-082218	Total/NA	Water	8270D	547375
460-163188-15	OB-31-082218	Total/NA	Water	8270D	547375
460-163188-16	RW-7-082218	Total/NA	Water	8270D	547375
460-163188-18	FB-03-082318	Total/NA	Water	8270D	547375
MB 460-547375/1-A	Method Blank	Total/NA	Water	8270D	547375
LCS 460-547375/2-A	Lab Control Sample	Total/NA	Water	8270D	547375
LCS 460-547375/4-A	Lab Control Sample	Total/NA	Water	8270D	547375
LCSD 460-547375/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	547375
LCSD 460-547375/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	547375

Analysis Batch: 547568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	8270D SIM	547375
460-163188-3	OB-10-082218	Total/NA	Water	8270D SIM	547375
460-163188-4	OB-29-082218	Total/NA	Water	8270D SIM	547375
460-163188-5	OB-15B-082218	Total/NA	Water	8270D SIM	547375

GC/MS Semi VOA (Continued)

Analysis Batch: 547568 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-6	OB-33-082218	Total/NA	Water	8270D SIM	547375
460-163188-7	OB-32-082218	Total/NA	Water	8270D SIM	547375
460-163188-11	RW-5A-082218	Total/NA	Water	8270D SIM	547375
460-163188-12	OB-21-082218	Total/NA	Water	8270D SIM	547375
460-163188-15	OB-31-082218	Total/NA	Water	8270D SIM	547375
460-163188-16	RW-7-082218	Total/NA	Water	8270D SIM	547375
460-163188-18	FB-03-082318	Total/NA	Water	8270D SIM	547375
MB 460-547375/1-A	Method Blank	Total/NA	Water	8270D SIM	547375
LCS 460-547375/6-A	Lab Control Sample	Total/NA	Water	8270D SIM	547375
LCSD 460-547375/7-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	547375

Prep Batch: 548149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-9	OB-19-082218	Total/NA	Water	3510C	
460-163188-10	OB-11R-082218	Total/NA	Water	3510C	
460-163188-13	OB-27-082218	Total/NA	Water	3510C	
460-163188-14	OB-30B-082218	Total/NA	Water	3510C	
MB 460-548149/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-548149/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-548149/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-548149/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-548149/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-163302-L-21-A MS	Matrix Spike	Total/NA	Water	3510C	
460-163302-L-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 548257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-9	OB-19-082218	Total/NA	Water	8270D	548149
460-163188-10	OB-11R-082218	Total/NA	Water	8270D	548149
460-163188-13	OB-27-082218	Total/NA	Water	8270D	548149
460-163188-14	OB-30B-082218	Total/NA	Water	8270D	548149
MB 460-548149/1-A	Method Blank	Total/NA	Water	8270D	548149
LCS 460-548149/2-A	Lab Control Sample	Total/NA	Water	8270D	548149
LCS 460-548149/3-A	Lab Control Sample	Total/NA	Water	8270D	548149
460-163302-L-21-A MS	Matrix Spike	Total/NA	Water	8270D	548149
460-163302-L-21-B MSD	Matrix Spike Duplicate	Total/NA	Water	8270D	548149

Analysis Batch: 548270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-9	OB-19-082218	Total/NA	Water	8270D SIM	548149
460-163188-10	OB-11R-082218	Total/NA	Water	8270D SIM	548149
460-163188-13	OB-27-082218	Total/NA	Water	8270D SIM	548149
460-163188-14	OB-30B-082218	Total/NA	Water	8270D SIM	548149
MB 460-548149/1-A	Method Blank	Total/NA	Water	8270D SIM	548149
LCS 460-548149/4-A	Lab Control Sample	Total/NA	Water	8270D SIM	548149
LCSD 460-548149/5-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	548149

GC Semi VOA

Prep Batch: 547236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	3510C	
460-163188-3	OB-10-082218	Total/NA	Water	3510C	
460-163188-4	OB-29-082218	Total/NA	Water	3510C	
MB 460-547236/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-547236/2-A	Lab Control Sample	Total/NA	Water	3510C	
460-163149-O-2-A MS	Matrix Spike	Total/NA	Water	3510C	
460-163149-O-2-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Prep Batch: 547238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-5	OB-15B-082218	Total/NA	Water	3510C	
460-163188-6	OB-33-082218	Total/NA	Water	3510C	
460-163188-7	OB-32-082218	Total/NA	Water	3510C	
460-163188-9	OB-19-082218	Total/NA	Water	3510C	
460-163188-10	OB-11R-082218	Total/NA	Water	3510C	
460-163188-11	RW-5A-082218	Total/NA	Water	3510C	
460-163188-12	OB-21-082218	Total/NA	Water	3510C	
460-163188-13	OB-27-082218	Total/NA	Water	3510C	
460-163188-14	OB-30B-082218	Total/NA	Water	3510C	
460-163188-15	OB-31-082218	Total/NA	Water	3510C	
460-163188-16	RW-7-082218	Total/NA	Water	3510C	
460-163188-18	FB-03-082318	Total/NA	Water	3510C	
MB 460-547238/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-547238/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-547238/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 547434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-5	OB-15B-082218	Total/NA	Water	8082A	547238
460-163188-6	OB-33-082218	Total/NA	Water	8082A	547238
460-163188-7	OB-32-082218	Total/NA	Water	8082A	547238
460-163188-9	OB-19-082218	Total/NA	Water	8082A	547238
460-163188-10	OB-11R-082218	Total/NA	Water	8082A	547238
460-163188-11	RW-5A-082218	Total/NA	Water	8082A	547238
460-163188-12	OB-21-082218	Total/NA	Water	8082A	547238
460-163188-13	OB-27-082218	Total/NA	Water	8082A	547238
460-163188-14	OB-30B-082218	Total/NA	Water	8082A	547238
460-163188-15	OB-31-082218	Total/NA	Water	8082A	547238
460-163188-16	RW-7-082218	Total/NA	Water	8082A	547238
460-163188-18	FB-03-082318	Total/NA	Water	8082A	547238
MB 460-547238/1-A	Method Blank	Total/NA	Water	8082A	547238
LCS 460-547238/2-A	Lab Control Sample	Total/NA	Water	8082A	547238
LCSD 460-547238/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	547238

Analysis Batch: 547439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	8082A	547236
460-163188-3	OB-10-082218	Total/NA	Water	8082A	547236
460-163188-4	OB-29-082218	Total/NA	Water	8082A	547236
MB 460-547236/1-A	Method Blank	Total/NA	Water	8082A	547236
LCS 460-547236/2-A	Lab Control Sample	Total/NA	Water	8082A	547236

GC Semi VOA (Continued)

Analysis Batch: 547439 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163149-O-2-A MS	Matrix Spike	Total/NA	Water	8082A	547236
460-163149-O-2-B MSD	Matrix Spike Duplicate	Total/NA	Water	8082A	547236

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Analysis Batch: 547542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	9056A	
460-163188-3	OB-10-082218	Total/NA	Water	9056A	
460-163188-4	OB-29-082218	Total/NA	Water	9056A	
460-163188-5	OB-15B-082218	Total/NA	Water	9056A	
460-163188-6	OB-33-082218	Total/NA	Water	9056A	
460-163188-7	OB-32-082218	Total/NA	Water	9056A	
460-163188-9	OB-19-082218	Total/NA	Water	9056A	
460-163188-10	OB-11R-082218	Total/NA	Water	9056A	
460-163188-11	RW-5A-082218	Total/NA	Water	9056A	
460-163188-12	OB-21-082218	Total/NA	Water	9056A	
460-163188-13	OB-27-082218	Total/NA	Water	9056A	
460-163188-14	OB-30B-082218	Total/NA	Water	9056A	
460-163188-15	OB-31-082218	Total/NA	Water	9056A	
460-163188-16	RW-7-082218	Total/NA	Water	9056A	
460-163188-18	FB-03-082318	Total/NA	Water	9056A	
MB 460-547542/3	Method Blank	Total/NA	Water	9056A	
LCS 460-547542/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-547542/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163188-12 MS	OB-21-082218	Total/NA	Water	9056A	
460-163188-12 MSD	OB-21-082218	Total/NA	Water	9056A	
460-163188-13 MS	OB-27-082218	Total/NA	Water	9056A	
460-163188-13 MSD	OB-27-082218	Total/NA	Water	9056A	
460-163188-13 DU	OB-27-082218	Total/NA	Water	9056A	

Analysis Batch: 547688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-14 - DL	OB-30B-082218	Total/NA	Water	9056A	
MB 460-547688/3	Method Blank	Total/NA	Water	9056A	
LCS 460-547688/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-547688/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163188-12 DU - DL	OB-21-082218	Total/NA	Water	9056A	

Metals

Filtration Batch: 547690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Dissolved	Water	FILTRATION	
460-163188-3	OB-10-082218	Dissolved	Water	FILTRATION	
460-163188-4	OB-29-082218	Dissolved	Water	FILTRATION	
460-163188-5	OB-15B-082218	Dissolved	Water	FILTRATION	
460-163188-6	OB-33-082218	Dissolved	Water	FILTRATION	
460-163188-7	OB-32-082218	Dissolved	Water	FILTRATION	
460-163188-9	OB-19-082218	Dissolved	Water	FILTRATION	

Metals (Continued)

Filtration Batch: 547690 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-10	OB-11R-082218	Dissolved	Water	FILTRATION	
460-163188-11	RW-5A-082218	Dissolved	Water	FILTRATION	
460-163188-12	OB-21-082218	Dissolved	Water	FILTRATION	
460-163188-13	OB-27-082218	Dissolved	Water	FILTRATION	
460-163188-14	OB-30B-082218	Dissolved	Water	FILTRATION	
460-163188-15	OB-31-082218	Dissolved	Water	FILTRATION	
460-163188-16	RW-7-082218	Dissolved	Water	FILTRATION	
460-163188-18	FB-03-082318	Dissolved	Water	FILTRATION	
MB 460-547690/1-C	Method Blank	Dissolved	Water	FILTRATION	
460-163188-2 MS	OB-13-082218	Dissolved	Water	FILTRATION	
460-163188-2 DU	OB-13-082218	Dissolved	Water	FILTRATION	

Prep Batch: 547720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Dissolved	Water	3010A	547690
460-163188-3	OB-10-082218	Dissolved	Water	3010A	547690
460-163188-4	OB-29-082218	Dissolved	Water	3010A	547690
460-163188-5	OB-15B-082218	Dissolved	Water	3010A	547690
460-163188-6	OB-33-082218	Dissolved	Water	3010A	547690
460-163188-7	OB-32-082218	Dissolved	Water	3010A	547690
460-163188-9	OB-19-082218	Dissolved	Water	3010A	547690
460-163188-10	OB-11R-082218	Dissolved	Water	3010A	547690
460-163188-11	RW-5A-082218	Dissolved	Water	3010A	547690
460-163188-12	OB-21-082218	Dissolved	Water	3010A	547690
460-163188-13	OB-27-082218	Dissolved	Water	3010A	547690
460-163188-14	OB-30B-082218	Dissolved	Water	3010A	547690
460-163188-15	OB-31-082218	Dissolved	Water	3010A	547690
460-163188-16	RW-7-082218	Dissolved	Water	3010A	547690
460-163188-18	FB-03-082318	Dissolved	Water	3010A	547690
MB 460-547690/1-C	Method Blank	Dissolved	Water	3010A	547690
LCS 460-547720/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-163188-2 MS	OB-13-082218	Dissolved	Water	3010A	547690
460-163188-2 DU	OB-13-082218	Dissolved	Water	3010A	547690

Analysis Batch: 547812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Dissolved	Water	6020B	547720
460-163188-3	OB-10-082218	Dissolved	Water	6020B	547720
460-163188-4	OB-29-082218	Dissolved	Water	6020B	547720
460-163188-5	OB-15B-082218	Dissolved	Water	6020B	547720
460-163188-6	OB-33-082218	Dissolved	Water	6020B	547720
460-163188-7	OB-32-082218	Dissolved	Water	6020B	547720
460-163188-9	OB-19-082218	Dissolved	Water	6020B	547720
460-163188-10	OB-11R-082218	Dissolved	Water	6020B	547720
460-163188-11	RW-5A-082218	Dissolved	Water	6020B	547720
460-163188-12	OB-21-082218	Dissolved	Water	6020B	547720
460-163188-13	OB-27-082218	Dissolved	Water	6020B	547720
460-163188-14	OB-30B-082218	Dissolved	Water	6020B	547720
460-163188-15	OB-31-082218	Dissolved	Water	6020B	547720
460-163188-16	RW-7-082218	Dissolved	Water	6020B	547720
460-163188-18	FB-03-082318	Dissolved	Water	6020B	547720

Metals (Continued)

Analysis Batch: 547812 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-547690/1-C	Method Blank	Dissolved	Water	6020B	547720
LCS 460-547720/2-A	Lab Control Sample	Total/NA	Water	6020B	547720
460-163188-2 MS	OB-13-082218	Dissolved	Water	6020B	547720
460-163188-2 DU	OB-13-082218	Dissolved	Water	6020B	547720

Filtration Batch: 548057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Dissolved	Water	FILTRATION	
460-163188-3	OB-10-082218	Dissolved	Water	FILTRATION	
460-163188-4	OB-29-082218	Dissolved	Water	FILTRATION	
460-163188-5	OB-15B-082218	Dissolved	Water	FILTRATION	
460-163188-6	OB-33-082218	Dissolved	Water	FILTRATION	
460-163188-7	OB-32-082218	Dissolved	Water	FILTRATION	
460-163188-9	OB-19-082218	Dissolved	Water	FILTRATION	
460-163188-10	OB-11R-082218	Dissolved	Water	FILTRATION	
460-163188-11	RW-5A-082218	Dissolved	Water	FILTRATION	
460-163188-12	OB-21-082218	Dissolved	Water	FILTRATION	
460-163188-13	OB-27-082218	Dissolved	Water	FILTRATION	
460-163188-14	OB-30B-082218	Dissolved	Water	FILTRATION	
460-163188-15	OB-31-082218	Dissolved	Water	FILTRATION	
460-163188-16	RW-7-082218	Dissolved	Water	FILTRATION	
460-163188-18	FB-03-082318	Dissolved	Water	FILTRATION	
MB 460-548057/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163188-3 MS	OB-10-082218	Dissolved	Water	FILTRATION	
460-163188-3 DU	OB-10-082218	Dissolved	Water	FILTRATION	

Prep Batch: 548073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	7470A	
460-163188-3	OB-10-082218	Total/NA	Water	7470A	
460-163188-4	OB-29-082218	Total/NA	Water	7470A	
460-163188-5	OB-15B-082218	Total/NA	Water	7470A	
460-163188-6	OB-33-082218	Total/NA	Water	7470A	
460-163188-7	OB-32-082218	Total/NA	Water	7470A	
460-163188-9	OB-19-082218	Total/NA	Water	7470A	
460-163188-10	OB-11R-082218	Total/NA	Water	7470A	
460-163188-11	RW-5A-082218	Total/NA	Water	7470A	
460-163188-12	OB-21-082218	Total/NA	Water	7470A	
460-163188-13	OB-27-082218	Total/NA	Water	7470A	
460-163188-14	OB-30B-082218	Total/NA	Water	7470A	
460-163188-15	OB-31-082218	Total/NA	Water	7470A	
460-163188-16	RW-7-082218	Total/NA	Water	7470A	
460-163188-18	FB-03-082318	Total/NA	Water	7470A	
MB 460-548073/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-548073/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163188-7 MS	OB-32-082218	Total/NA	Water	7470A	
460-163188-7 DU	OB-32-082218	Total/NA	Water	7470A	

Prep Batch: 548076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Dissolved	Water	7470A	548057

Metals (Continued)

Prep Batch: 548076 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-3	OB-10-082218	Dissolved	Water	7470A	548057
460-163188-4	OB-29-082218	Dissolved	Water	7470A	548057
460-163188-5	OB-15B-082218	Dissolved	Water	7470A	548057
460-163188-6	OB-33-082218	Dissolved	Water	7470A	548057
460-163188-7	OB-32-082218	Dissolved	Water	7470A	548057
460-163188-9	OB-19-082218	Dissolved	Water	7470A	548057
460-163188-10	OB-11R-082218	Dissolved	Water	7470A	548057
460-163188-11	RW-5A-082218	Dissolved	Water	7470A	548057
460-163188-12	OB-21-082218	Dissolved	Water	7470A	548057
460-163188-13	OB-27-082218	Dissolved	Water	7470A	548057
460-163188-14	OB-30B-082218	Dissolved	Water	7470A	548057
460-163188-15	OB-31-082218	Dissolved	Water	7470A	548057
460-163188-16	RW-7-082218	Dissolved	Water	7470A	548057
460-163188-18	FB-03-082318	Dissolved	Water	7470A	548057
MB 460-548057/1-B	Method Blank	Dissolved	Water	7470A	548057
LCS 460-548076/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163188-3 MS	OB-10-082218	Dissolved	Water	7470A	548057
460-163188-3 DU	OB-10-082218	Dissolved	Water	7470A	548057

Analysis Batch: 548117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Dissolved	Water	7470A	548076
460-163188-2	OB-13-082218	Total/NA	Water	7470A	548073
460-163188-3	OB-10-082218	Dissolved	Water	7470A	548076
460-163188-3	OB-10-082218	Total/NA	Water	7470A	548073
460-163188-4	OB-29-082218	Dissolved	Water	7470A	548076
460-163188-4	OB-29-082218	Total/NA	Water	7470A	548073
460-163188-5	OB-15B-082218	Dissolved	Water	7470A	548076
460-163188-5	OB-15B-082218	Total/NA	Water	7470A	548073
460-163188-6	OB-33-082218	Dissolved	Water	7470A	548076
460-163188-6	OB-33-082218	Total/NA	Water	7470A	548073
460-163188-7	OB-32-082218	Dissolved	Water	7470A	548076
460-163188-7	OB-32-082218	Total/NA	Water	7470A	548073
460-163188-9	OB-19-082218	Dissolved	Water	7470A	548076
460-163188-9	OB-19-082218	Total/NA	Water	7470A	548073
460-163188-10	OB-11R-082218	Dissolved	Water	7470A	548076
460-163188-10	OB-11R-082218	Total/NA	Water	7470A	548073
460-163188-11	RW-5A-082218	Dissolved	Water	7470A	548076
460-163188-11	RW-5A-082218	Total/NA	Water	7470A	548073
460-163188-12	OB-21-082218	Dissolved	Water	7470A	548076
460-163188-12	OB-21-082218	Total/NA	Water	7470A	548073
460-163188-13	OB-27-082218	Dissolved	Water	7470A	548076
460-163188-13	OB-27-082218	Total/NA	Water	7470A	548073
460-163188-14	OB-30B-082218	Dissolved	Water	7470A	548076
460-163188-14	OB-30B-082218	Total/NA	Water	7470A	548073
460-163188-15	OB-31-082218	Dissolved	Water	7470A	548076
460-163188-15	OB-31-082218	Total/NA	Water	7470A	548073
460-163188-16	RW-7-082218	Dissolved	Water	7470A	548076
460-163188-16	RW-7-082218	Total/NA	Water	7470A	548073
460-163188-18	FB-03-082318	Dissolved	Water	7470A	548076
460-163188-18	FB-03-082318	Total/NA	Water	7470A	548073

Metals (Continued)

Analysis Batch: 548117 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-548057/1-B	Method Blank	Dissolved	Water	7470A	548076
MB 460-548073/1-A	Method Blank	Total/NA	Water	7470A	548073
LCS 460-548073/2-A	Lab Control Sample	Total/NA	Water	7470A	548073
LCS 460-548076/2-A	Lab Control Sample	Total/NA	Water	7470A	548076
460-163188-3 MS	OB-10-082218	Dissolved	Water	7470A	548076
460-163188-7 MS	OB-32-082218	Total/NA	Water	7470A	548073
460-163188-3 DU	OB-10-082218	Dissolved	Water	7470A	548076
460-163188-7 DU	OB-32-082218	Total/NA	Water	7470A	548073

Prep Batch: 548334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	3010A	
460-163188-3	OB-10-082218	Total/NA	Water	3010A	
460-163188-4	OB-29-082218	Total/NA	Water	3010A	
460-163188-5	OB-15B-082218	Total/NA	Water	3010A	
460-163188-6	OB-33-082218	Total/NA	Water	3010A	
460-163188-7	OB-32-082218	Total/NA	Water	3010A	
460-163188-9	OB-19-082218	Total/NA	Water	3010A	
460-163188-10	OB-11R-082218	Total/NA	Water	3010A	
460-163188-11	RW-5A-082218	Total/NA	Water	3010A	
460-163188-12	OB-21-082218	Total/NA	Water	3010A	
460-163188-13	OB-27-082218	Total/NA	Water	3010A	
460-163188-14	OB-30B-082218	Total/NA	Water	3010A	
460-163188-15	OB-31-082218	Total/NA	Water	3010A	
460-163188-16	RW-7-082218	Total/NA	Water	3010A	
460-163188-18	FB-03-082318	Total/NA	Water	3010A	
MB 460-548334/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-548334/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-163188-2 MS	OB-13-082218	Total/NA	Water	3010A	
460-163188-2 DU	OB-13-082218	Total/NA	Water	3010A	

Analysis Batch: 548421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	6020B	548334
460-163188-3	OB-10-082218	Total/NA	Water	6020B	548334
460-163188-4	OB-29-082218	Total/NA	Water	6020B	548334
460-163188-5	OB-15B-082218	Total/NA	Water	6020B	548334
460-163188-6	OB-33-082218	Total/NA	Water	6020B	548334
460-163188-7	OB-32-082218	Total/NA	Water	6020B	548334
460-163188-9	OB-19-082218	Total/NA	Water	6020B	548334
460-163188-10	OB-11R-082218	Total/NA	Water	6020B	548334
460-163188-11	RW-5A-082218	Total/NA	Water	6020B	548334
460-163188-12	OB-21-082218	Total/NA	Water	6020B	548334
460-163188-13	OB-27-082218	Total/NA	Water	6020B	548334
460-163188-14	OB-30B-082218	Total/NA	Water	6020B	548334
460-163188-15	OB-31-082218	Total/NA	Water	6020B	548334
460-163188-16	RW-7-082218	Total/NA	Water	6020B	548334
460-163188-18	FB-03-082318	Total/NA	Water	6020B	548334
MB 460-548334/1-A ^2	Method Blank	Total/NA	Water	6020B	548334
LCS 460-548334/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	548334
460-163188-2 MS	OB-13-082218	Total/NA	Water	6020B	548334

Metals (Continued)

Analysis Batch: 548421 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2 DU	OB-13-082218	Total/NA	Water	6020B	548334

Analysis Batch: 548676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Dissolved	Water	6020B	547720
460-163188-2 MS	OB-13-082218	Dissolved	Water	6020B	547720
460-163188-2 DU	OB-13-082218	Dissolved	Water	6020B	547720

Analysis Batch: 548687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-10	OB-11R-082218	Total/NA	Water	6020B	548334

General Chemistry

Analysis Batch: 547451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	SM 2320B	
460-163188-3	OB-10-082218	Total/NA	Water	SM 2320B	
460-163188-4	OB-29-082218	Total/NA	Water	SM 2320B	
460-163188-5	OB-15B-082218	Total/NA	Water	SM 2320B	
460-163188-6	OB-33-082218	Total/NA	Water	SM 2320B	
460-163188-7	OB-32-082218	Total/NA	Water	SM 2320B	
460-163188-9	OB-19-082218	Total/NA	Water	SM 2320B	
460-163188-10	OB-11R-082218	Total/NA	Water	SM 2320B	
460-163188-11	RW-5A-082218	Total/NA	Water	SM 2320B	
460-163188-12	OB-21-082218	Total/NA	Water	SM 2320B	
460-163188-13	OB-27-082218	Total/NA	Water	SM 2320B	
460-163188-14	OB-30B-082218	Total/NA	Water	SM 2320B	
460-163188-15	OB-31-082218	Total/NA	Water	SM 2320B	
460-163188-16	RW-7-082218	Total/NA	Water	SM 2320B	
MB 460-547451/25	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-547451/26	Lab Control Sample	Total/NA	Water	SM 2320B	
460-163188-2 DU	OB-13-082218	Total/NA	Water	SM 2320B	

Analysis Batch: 547667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-18	FB-03-082318	Total/NA	Water	SM 2320B	
MB 460-547667/2	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-547667/3	Lab Control Sample	Total/NA	Water	SM 2320B	
460-163302-A-21 DU	Duplicate	Total/NA	Water	SM 2320B	

Prep Batch: 548020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	9012B	
460-163188-3	OB-10-082218	Total/NA	Water	9012B	
460-163188-4	OB-29-082218	Total/NA	Water	9012B	
460-163188-5	OB-15B-082218	Total/NA	Water	9012B	
460-163188-6	OB-33-082218	Total/NA	Water	9012B	
460-163188-7	OB-32-082218	Total/NA	Water	9012B	
460-163188-9	OB-19-082218	Total/NA	Water	9012B	

General Chemistry (Continued)

Prep Batch: 548020 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-10	OB-11R-082218	Total/NA	Water	9012B	
460-163188-11	RW-5A-082218	Total/NA	Water	9012B	
460-163188-12	OB-21-082218	Total/NA	Water	9012B	
460-163188-13	OB-27-082218	Total/NA	Water	9012B	
460-163188-14	OB-30B-082218	Total/NA	Water	9012B	
460-163188-15	OB-31-082218	Total/NA	Water	9012B	
MB 460-548020/1-A	Method Blank	Total/NA	Water	9012B	
LCS 460-548020/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163188-6 MS	OB-33-082218	Total/NA	Water	9012B	
460-163188-6 MSD	OB-33-082218	Total/NA	Water	9012B	

Analysis Batch: 548373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-2	OB-13-082218	Total/NA	Water	9012B	548020
460-163188-3	OB-10-082218	Total/NA	Water	9012B	548020
460-163188-4	OB-29-082218	Total/NA	Water	9012B	548020
460-163188-5	OB-15B-082218	Total/NA	Water	9012B	548020
460-163188-6	OB-33-082218	Total/NA	Water	9012B	548020
460-163188-7	OB-32-082218	Total/NA	Water	9012B	548020
460-163188-9	OB-19-082218	Total/NA	Water	9012B	548020
460-163188-10	OB-11R-082218	Total/NA	Water	9012B	548020
460-163188-11	RW-5A-082218	Total/NA	Water	9012B	548020
460-163188-12	OB-21-082218	Total/NA	Water	9012B	548020
460-163188-13	OB-27-082218	Total/NA	Water	9012B	548020
460-163188-14	OB-30B-082218	Total/NA	Water	9012B	548020
460-163188-15	OB-31-082218	Total/NA	Water	9012B	548020
MB 460-548020/1-A	Method Blank	Total/NA	Water	9012B	548020
LCS 460-548020/2-A	Lab Control Sample	Total/NA	Water	9012B	548020
460-163188-6 MS	OB-33-082218	Total/NA	Water	9012B	548020
460-163188-6 MSD	OB-33-082218	Total/NA	Water	9012B	548020

Prep Batch: 548572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-16	RW-7-082218	Total/NA	Water	9012B	
460-163188-18	FB-03-082318	Total/NA	Water	9012B	
MB 460-548572/1-A	Method Blank	Total/NA	Water	9012B	
LCS 460-548572/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163149-H-11-B MS	Matrix Spike	Total/NA	Water	9012B	
460-163149-H-11-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	

Analysis Batch: 548643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163188-16	RW-7-082218	Total/NA	Water	9012B	548572
460-163188-18	FB-03-082318	Total/NA	Water	9012B	548572
MB 460-548572/1-A	Method Blank	Total/NA	Water	9012B	548572
LCS 460-548572/2-A	Lab Control Sample	Total/NA	Water	9012B	548572
460-163149-H-11-B MS	Matrix Spike	Total/NA	Water	9012B	548572
460-163149-H-11-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	548572

Client Sample ID: OB-13-082218

Lab Sample ID: 460-163188-2

Date Collected: 08/22/18 12:00

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 12:20	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547854	08/28/18 06:17	XXC	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547548	08/26/18 17:57	SK	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547568	08/26/18 18:51	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 01:09	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 18:58	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 05:45	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 12:01	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 15:24	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		10	548676	08/30/18 17:35	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 21:09	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:20	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 16:32	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 12:49	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 14:31	PHM	TAL EDI

Client Sample ID: OB-10-082218

Lab Sample ID: 460-163188-3

Date Collected: 08/22/18 14:30

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 12:44	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547967	08/28/18 10:21	SZD	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547548	08/26/18 18:18	SK	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547568	08/26/18 19:12	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 01:27	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 19:03	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 06:08	JXZ	TAL EDI

Client Sample ID: OB-10-082218

Lab Sample ID: 460-163188-3

Date Collected: 08/22/18 14:30

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	547542	08/26/18 12:14	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 15:30	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 21:14	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 16:46	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 16:34	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 12:50	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 14:43	PHM	TAL EDI

Client Sample ID: OB-29-082218

Lab Sample ID: 460-163188-4

Date Collected: 08/22/18 16:05

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 13:07	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547854	08/28/18 03:11	XXC	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547548	08/26/18 18:39	SK	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547568	08/26/18 19:33	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 01:45	SK	TAL EDI
Total/NA	Prep	3510C			547236	08/24/18 19:03	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547439	08/26/18 06:32	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 12:27	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 15:34	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 21:17	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:22	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 16:35	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 12:51	HTV	TAL EDI

Client Sample ID: OB-29-082218

Lab Sample ID: 460-163188-4

Date Collected: 08/22/18 16:05

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 14:50	PHM	TAL EDI

Client Sample ID: OB-15B-082218

Lab Sample ID: 460-163188-5

Date Collected: 08/22/18 12:15

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 13:31	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547854	08/28/18 03:34	XXC	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547548	08/26/18 19:00	SK	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547568	08/26/18 19:55	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 02:03	SK	TAL EDI
Total/NA	Prep	3510C			547238	08/24/18 19:08	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547434	08/25/18 20:22	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 12:40	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 15:58	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 21:28	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:27	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 16:37	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 12:52	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 14:57	PHM	TAL EDI

Client Sample ID: OB-33-082218

Lab Sample ID: 460-163188-6

Date Collected: 08/22/18 14:25

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 13:54	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547854	08/28/18 03:57	XXC	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547548	08/26/18 19:22	SK	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547568	08/26/18 20:16	SK	TAL EDI

Client Sample ID: OB-33-082218

Lab Sample ID: 460-163188-6

Date Collected: 08/22/18 14:25

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 02:20	SK	TAL EDI
Total/NA	Prep	3510C			547238	08/24/18 19:08	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547434	08/25/18 20:38	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 12:53	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 16:01	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 21:30	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:29	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 17:40	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 12:53	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 15:05	PHM	TAL EDI

Client Sample ID: OB-32-082218

Lab Sample ID: 460-163188-7

Date Collected: 08/22/18 16:15

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 14:18	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547854	08/28/18 04:21	XXC	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547548	08/26/18 19:43	SK	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547568	08/26/18 20:37	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 02:38	SK	TAL EDI
Total/NA	Prep	3510C			547238	08/24/18 19:08	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547434	08/25/18 20:54	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 13:05	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 16:04	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 21:33	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:00	RBS	TAL EDI

Client Sample ID: OB-32-082218

Lab Sample ID: 460-163188-7

Date Collected: 08/22/18 16:15

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 15:37	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 12:59	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 15:12	PHM	TAL EDI

Client Sample ID: OB-19-082218

Lab Sample ID: 460-163188-9

Date Collected: 08/22/18 15:50

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 14:41	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547854	08/28/18 04:44	XXC	TAL EDI
Total/NA	Prep	3510C			548149	08/28/18 20:11	GRB	TAL EDI
Total/NA	Analysis	8270D		1	548257	08/29/18 14:30	DAN	TAL EDI
Total/NA	Prep	3510C			548149	08/28/18 20:11	GRB	TAL EDI
Total/NA	Analysis	8270D SIM		1	548270	08/29/18 14:28	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 02:56	SK	TAL EDI
Total/NA	Prep	3510C			547238	08/24/18 19:08	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547434	08/25/18 21:10	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 13:57	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 16:08	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 21:36	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:01	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 15:58	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 13:00	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 15:19	PHM	TAL EDI

Client Sample ID: OB-11R-082218

Lab Sample ID: 460-163188-10

Date Collected: 08/22/18 14:10

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 15:04	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547967	08/28/18 11:07	SZD	TAL EDI

Client Sample ID: OB-11R-082218

Lab Sample ID: 460-163188-10

Date Collected: 08/22/18 14:10

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			548149	08/28/18 20:11	GRB	TAL EDI
Total/NA	Analysis	8270D		1	548257	08/29/18 14:51	DAN	TAL EDI
Total/NA	Prep	3510C			548149	08/28/18 20:11	GRB	TAL EDI
Total/NA	Analysis	8270D SIM		1	548270	08/29/18 14:49	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 03:14	SK	TAL EDI
Total/NA	Prep	3510C			547238	08/24/18 19:08	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547434	08/25/18 21:26	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 14:10	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 16:11	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 21:38	PHP	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		10	548687	08/30/18 15:48	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:07	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 16:00	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 13:01	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 15:27	PHM	TAL EDI

Client Sample ID: RW-5A-082218

Lab Sample ID: 460-163188-11

Date Collected: 08/22/18 12:30

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 15:27	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547967	08/28/18 11:31	SZD	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547548	08/26/18 20:46	SK	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547568	08/26/18 21:41	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 03:32	SK	TAL EDI
Total/NA	Prep	3510C			547238	08/24/18 19:08	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547434	08/25/18 21:42	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 14:23	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI

Client Sample ID: RW-5A-082218

Date Collected: 08/22/18 12:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020B		2	547812	08/27/18 16:15	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 21:41	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:08	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 16:02	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 13:02	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 15:34	PHM	TAL EDI

Client Sample ID: OB-21-082218

Date Collected: 08/22/18 10:30
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 15:51	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547967	08/28/18 11:54	SZD	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547548	08/26/18 21:07	SK	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547568	08/26/18 22:02	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 03:49	SK	TAL EDI
Total/NA	Prep	3510C			547238	08/24/18 19:08	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547434	08/25/18 21:58	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 15:12	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 16:18	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 21:43	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:10	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 16:03	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 13:03	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 15:42	PHM	TAL EDI

Client Sample ID: OB-27-082218

Lab Sample ID: 460-163188-13

Date Collected: 08/22/18 14:35

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 16:15	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547967	08/28/18 12:41	SZD	TAL EDI
Total/NA	Prep	3510C			548149	08/28/18 20:11	GRB	TAL EDI
Total/NA	Analysis	8270D		1	548257	08/29/18 15:13	DAN	TAL EDI
Total/NA	Prep	3510C			548149	08/28/18 20:11	GRB	TAL EDI
Total/NA	Analysis	8270D SIM		1	548270	08/29/18 15:11	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 04:07	SK	TAL EDI
Total/NA	Prep	3510C			547238	08/24/18 19:08	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547434	08/25/18 22:14	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 16:04	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 16:38	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 21:46	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:12	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 16:05	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 13:03	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 15:48	PHM	TAL EDI

Client Sample ID: OB-30B-082218

Lab Sample ID: 460-163188-14

Date Collected: 08/22/18 15:55

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548123	08/28/18 20:49	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	547967	08/28/18 13:05	SZD	TAL EDI
Total/NA	Prep	3510C			548149	08/28/18 20:11	GRB	TAL EDI
Total/NA	Analysis	8270D		1	548257	08/29/18 15:34	DAN	TAL EDI
Total/NA	Prep	3510C			548149	08/28/18 20:11	GRB	TAL EDI
Total/NA	Analysis	8270D SIM		1	548270	08/29/18 15:32	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 04:25	SK	TAL EDI
Total/NA	Prep	3510C			547238	08/24/18 19:08	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547434	08/25/18 22:30	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 17:35	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	8	547688	08/27/18 10:20	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI

Client Sample ID: OB-30B-082218

Date Collected: 08/22/18 15:55
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 16:25	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 21:59	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:13	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 16:25	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 13:04	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 15:55	PHM	TAL EDI

Client Sample ID: OB-31-082218

Date Collected: 08/22/18 12:20
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 17:02	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547967	08/28/18 13:28	SZD	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547548	08/26/18 22:10	SK	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547568	08/26/18 23:05	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 04:43	SK	TAL EDI
Total/NA	Prep	3510C			547238	08/24/18 19:08	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547434	08/25/18 22:46	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 17:48	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 16:42	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 22:02	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:15	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 16:27	RBS	TAL EDI
Total/NA	Prep	9012B			548020	08/28/18 09:25	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548373	08/29/18 13:05	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 16:02	PHM	TAL EDI

Client Sample ID: RW-7-082218

Lab Sample ID: 460-163188-16

Date Collected: 08/22/18 10:25

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 17:26	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547967	08/28/18 13:52	SZD	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547548	08/26/18 22:31	SK	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547568	08/26/18 23:27	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 05:00	SK	TAL EDI
Total/NA	Prep	3510C			547238	08/24/18 19:08	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547434	08/25/18 23:02	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 18:01	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 16:45	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 22:18	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:17	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 16:29	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:43	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547451	08/25/18 16:09	PHM	TAL EDI

Client Sample ID: TB-02-082318

Lab Sample ID: 460-163188-17

Date Collected: 08/23/18 00:00

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 11:33	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	548240	08/29/18 16:34	SZD	TAL EDI

Client Sample ID: FB-03-082318

Lab Sample ID: 460-163188-18

Date Collected: 08/23/18 08:00

Matrix: Water

Date Received: 08/23/18 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547649	08/27/18 11:56	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	547967	08/28/18 14:15	SZD	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547548	08/26/18 22:53	SK	TAL EDI
Total/NA	Prep	3510C			547375	08/25/18 10:05	KMH	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Client Sample ID: FB-03-082318

Date Collected: 08/23/18 08:00
Date Received: 08/23/18 11:25

Lab Sample ID: 460-163188-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D SIM		1	547568	08/26/18 23:48	SK	TAL EDI
Total/NA	Prep	3510C			547378	08/25/18 10:18	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547494	08/26/18 05:18	SK	TAL EDI
Total/NA	Prep	3510C			547238	08/24/18 19:08	GXY	TAL EDI
Total/NA	Analysis	8082A		1	547434	08/25/18 23:18	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547542	08/26/18 18:14	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			547690	08/27/18 08:49	MDC	TAL EDI
Dissolved	Prep	3010A			547720	08/27/18 09:32	MDC	TAL EDI
Dissolved	Analysis	6020B		2	547812	08/27/18 16:52	MDC	TAL EDI
Total/NA	Prep	3010A			548334	08/29/18 10:35	QZY	TAL EDI
Total/NA	Analysis	6020B		2	548421	08/29/18 21:57	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548057	08/28/18 12:30	RBS	TAL EDI
Dissolved	Prep	7470A			548076	08/28/18 13:04	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548117	08/28/18 17:19	RBS	TAL EDI
Total/NA	Prep	7470A			548073	08/28/18 12:51	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548117	08/28/18 16:30	RBS	TAL EDI
Total/NA	Prep	9012B			548572	08/30/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548643	08/30/18 12:44	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 09:39	PHM	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	12028	06-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	Ethylene Dibromide
8270D SIM	3510C	Water	Bis(2-chloroethyl)ether
9056A		Water	Chloride
9056A		Water	Sulfate

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL EDI
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
9056A	Anions, Ion Chromatography	SW846	TAL EDI
6020B	Metals (ICP/MS)	SW846	TAL EDI
7470A	Mercury (CVAA)	SW846	TAL EDI
9012B	Cyanide, Total andor Amenable	SW846	TAL EDI
SM 2320B	Alkalinity	SM	TAL EDI
3010A	Preparation, Total Metals	SW846	TAL EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI
7470A	Preparation, Mercury	SW846	TAL EDI
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL EDI
FILTRATION	Sample Filtration	None	TAL EDI

Protocol References:

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163188-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-163188-2	OB-13-082218	Water	08/22/18 12:00	08/23/18 11:25
460-163188-3	OB-10-082218	Water	08/22/18 14:30	08/23/18 11:25
460-163188-4	OB-29-082218	Water	08/22/18 16:05	08/23/18 11:25
460-163188-5	OB-15B-082218	Water	08/22/18 12:15	08/23/18 11:25
460-163188-6	OB-33-082218	Water	08/22/18 14:25	08/23/18 11:25
460-163188-7	OB-32-082218	Water	08/22/18 16:15	08/23/18 11:25
460-163188-9	OB-19-082218	Water	08/22/18 15:50	08/23/18 11:25
460-163188-10	OB-11R-082218	Water	08/22/18 14:10	08/23/18 11:25
460-163188-11	RW-5A-082218	Water	08/22/18 12:30	08/23/18 11:25
460-163188-12	OB-21-082218	Water	08/22/18 10:30	08/23/18 11:25
460-163188-13	OB-27-082218	Water	08/22/18 14:35	08/23/18 11:25
460-163188-14	OB-30B-082218	Water	08/22/18 15:55	08/23/18 11:25
460-163188-15	OB-31-082218	Water	08/22/18 12:20	08/23/18 11:25
460-163188-16	RW-7-082218	Water	08/22/18 10:25	08/23/18 11:25
460-163188-17	TB-02-082318	Water	08/23/18 00:00	08/23/18 11:25
460-163188-18	FB-03-082318	Water	08/23/18 08:00	08/23/18 11:25

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANAL

460-163188 Chain of Custody

ham Road
Jersey 08817
549-3900 Fax: (732) 549-3679

Page 1 of 2

8/31/2018

Name (for report and invoice) Tim Roeper	Samplers Name (Printed) Robert Lowbury	Site/Project Identification Ringwood
Company Cornerstone Environmental Group	P. O. # 180361-006	State (Location of site): NJ: X NY: Other:
		Regulatory Program: DKQP:
Address 100 Crystal Run Rd, Suite 101	Analysis Turnaround Time: Standard X	
City Middletown State NY 10941	Rush Charges Authorized For: 2 Week, 1 Week, Other	
Phone 845 695 0200 Fax		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 163188

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs + 6 TICs w SIM	TCL BNAs/SVOCs w SIM	1,4 Dioxane by Isotope Dilution	PCBs	Chloride	Sulfate	Alkalinity	TAL Metals	Dissolved TAL Metals	Total Cyanide	Sample Numbers
OB-3-082218	8/22/18	10:00	GW	15	X	X	X	X	X	X	X	X	X	X	1
OB-13-082218	8/22/18	12:00	GW	15	X	X	X	X	X	X	X	X	X	X	2
OB-10-082218	8/22/18	14:30	GW	15	X	X	X	X	X	X	X	X	X	X	3
OB-29-082218	8/22/18	16:05	GW	15	X	X	X	X	X	X	X	X	X	X	4
OB-15B-082218	8/22/18	12:15	GW	15	X	X	X	X	X	X	X	X	X	X	5
OB-33-082218	8/22/18	14:25	GW	15	X	X	X	X	X	X	X	X	X	X	6
OB-32-082218	8/22/18	16:15	GW	15	X	X	X	X	X	X	X	X	X	X	7
OB-24-082218	8/22/18	10:25	GW	15	X	X	X	X	X	X	X	X	X	X	8
OB-19-082218	8/22/18	15:50	GW	15	X	X	X	X	X	X	X	X	X	X	9
OB-11R-082218	8/22/18	14:10	GW	15	X	X	X	X	X	X	X	X	X	X	10
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH Soil:															
6 = Other _____, 7 = Other _____ Water:					2	1	1	1	1	1	1	1	1	5	

Special Instructions Water Metals Filtered (Yes/No)? No

Relinquished by	Company	Date / Time	Received by	Company
1)	Cornerstone	8/23/18 10:10	1) Tim Yap	TA EDISON
Relinquished by 2) Tim Yap	Company TA EDISON	Date / Time 8/23/18 11:25	Received by 2)	Company TA Edison
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

IR & 9 1.5°C 1.1°C 1.1°C 0.8°C 1.2°C NOCS

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

8/31/2018

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CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice) Tim Roeper	Samplers Name (Printed) Robert Lautenberg	Site/Project Identification Ringwood
Company Cornerstone Environmental Group	P. O. # 180361-006	State (Location of site): NJ: X NY: Other:
		Regulatory Program: DKQP:
Address 100 Crystal Run Rd, Suite 101	Analysis Turnaround Time: Standard X	
City Middletown State NY 10941	Rush Charges Authorized For: 2 Week 1 Week Other	
Phone 8456950200 Fax		

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs + 15 TICs by STM	TCL BNAs/SVOCs w/ STM	1,4 Dioxane by Isotope Dilution	PCBs	Chloride	Sulfate	Alkalinity	TAL Metals	Dissolved TAL Metals	Total Cyanide		Sample Numbers
RW-5A-082218	8/22/18	12:30	GW	15	X	X	X	X	X	X	X	X	X	X		11
OB-21-082218	8/22/18	10:30	GW	15	X	X	X	X	X	X	X	X	X	X		12
OB-27-082218	8/22/18	14:35	GW	15	X	X	X	X	X	X	X	X	X	X		13
OB-30B-082218	8/22/18	15:55	GW	15	X	X	X	X	X	X	X	X	X	X		14
OB-31-082218	8/22/18	12:20	GW	15	X	X	X	X	X	X	X	X	X	X		15
RW-7-082218	8/22/18	10:25	GW	15	X	X	X	X	X	X	X	X	X	X		16
TB-02-082318	8/23/18	-	BW	3	X											17
FB-03-082318	8/22/18	08:00	BW	15	X	X	X	X	X	X	X	X	X	X		18
																-
																-
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH 6 = Other _____, 7 = Other _____				Soil:												
				Water:	2	1	1	1	1	1	1	4	1	5	X	

LAB USE ONLY
Project No:
Job No: 103188

Special Instructions

Water Metals Filtered (Yes/No)? no

Relinquished by	Company	Date / Time	Received by	Company
1)	Cornerstone	8/23/18 10:10	1) Tim Yap	TA Edison
Relinquished by 2) Tim Yap	Company TA Edison	Date / Time 8/23/18 11:25	Received by 2)	Company TA Edison
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

IR # 9 1.5°C 1.1°C 1.2°C 0.8°C 1.2°C

NO LS

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 163188

Number of Coolers: 5 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	1.5 °C	1.5 °C	Cooler #4:	0.8 °C	0.8 °C	Cooler #7:	°C	°C
Cooler #2:	1.1 °C	1.1 °C	Cooler #5:	0.9 °C	0.9 °C	Cooler #8:	°C	°C
Cooler #3:	1.2 °C	1.2 °C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1												7/8			
2												7/2			
3												7/2			
4												7/2			
5												7/2			
6												7/2			
7												7/2			
8												7/2			
9												7/2			
10												7/2			
11												7/2			
12												7/2			
13												7/2			

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

* *Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: TY Date: 8/23/18

8/31/2018

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 163188

Number of Coolers: _____ IR Gun # _____

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	°C	°C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
14												12			
K												12			
16												12			
18												12			

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

* *Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ Date: _____

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 460-163188-1

Login Number: 163188
List Number: 1
Creator: Meyers, Gary

List Source: TestAmerica Edison

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-163302-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Dr. Tim Roeper

Authorized for release by:
9/14/2018 3:38:11 PM

Marie Meidhof, Senior Project Manager
(732)549-3900
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LINKS

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

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-163302-1

Laboratory: TestAmerica Edison

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 460-163302-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 8/24/2018 5:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 10 coolers at receipt time were 0.4º C, 0.5º C, 0.6º C, 0.7º C, 0.7º C, 0.8º C, 0.8º C, 0.9º C, 0.9º C and 1.0º C.

Receipt Exceptions

The 8260 and 8260-SIM analysis was canceled for the following samples on 08/31/2018 by the client, due to significiant headspace in the sample vials: OB-20B-082318 (460-163302-1), RW-6-082318 (460-163302-3), RW-6A-082318 (460-163302-4), CMS-50-082318 (460-163302-5), CMS-50-082318 (460-163302-5[MS]), CMS-50-082318 (460-163302-5[MSD]), CMS-100-082318 (460-163302-7), CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9) and SC-01-082418 (460-163302-22). The samples were recollected on 9/5/2018 and can be found in SDG 460-164119. Since sample #5 was submitted as MS/MSD, there will be no MS/MSD able to be reported for 8260 batch 460-548123 and 8260-SIM batch 460-548540.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples OB-20A-082318 (460-163302-2), OB-30C-082318 (460-163302-6), SC-02-082318 (460-163302-10), OB-5-082318 (460-163302-11), Dup-02-082318 (460-163302-12), OB-12-082318 (460-163302-13), OB-2-082318 (460-163302-14), TB-03-082418 (460-163302-15), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), PMS-50-082418 (460-163302-19), PMS-180-082418 (460-163302-20), PMS-230-082418 (460-163302-21), FB-03-082418 (460-163302-23) and RW-5-082418 (460-163302-24) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C DKQP. The samples were analyzed on 08/28/2018 and 08/29/2018.

Internal standard (ISTD) response for 1,4-Dioxane-d8 for the following sample was outside acceptance criteria: Dup-03-082418 (460-163302-18). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

No difficulties were encountered during the volatiles analysis.

All quality control parameters were within the acceptance limits.

Job ID: 460-163302-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) DKQP

Samples OB-20B-082318 (460-163302-1), OB-20A-082318 (460-163302-2), RW-6-082318 (460-163302-3), RW-6A-082318 (460-163302-4), CMS-50-082318 (460-163302-5), OB-30C-082318 (460-163302-6), CMS-100-082318 (460-163302-7), CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9), SC-02-082318 (460-163302-10), OB-5-082318 (460-163302-11), Dup-02-082318 (460-163302-12), OB-12-082318 (460-163302-13), OB-2-082318 (460-163302-14), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), PMS-50-082418 (460-163302-19), PMS-180-082418 (460-163302-20), PMS-230-082418 (460-163302-21), SC-01-082418 (460-163302-22), FB-03-082418 (460-163302-23) and RW-5-082418 (460-163302-24) were analyzed for Semivolatile organic compounds (GC/MS) DKQP in accordance with EPA SW-846 Method 8270D DKQP. The samples were prepared on 08/26/2018 and 08/28/2018 and analyzed on 08/27/2018 and 08/29/2018.

The continuing calibration verification (CCV) analyzed in batch 460-547625 was outside the method criteria for the following analyte: 2,2'-oxybis[1-chloropropane]. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The laboratory control sample (LCS) associated with preparation batch 460-547574 and analytical batch 460-547615 was outside DKQP recovery criteria but with laboratory generated limits for the following analyte: Hexachlorobutadiene. Hexachlorobutadiene failed the recovery criteria low for LCS 460-547574/2-A. The data has been reported.

The LCS associated with preparation batch 460-547599 and analytical batch 460-547625 was outside DKQP recovery criteria (low) but within laboratory generated limits for the following analyte: 2-Methylphenol. The data has been reported.

The LCS associated with preparation batch 460-547599 and analytical batch 460-547625 was outside DKQP recovery criteria (low) but within laboratory generated limits for the following analyte: Caprolactam. The data has been reported.

The LCS for preparation batch 460-547757 and analytical batch 460-547878 recovered outside control limits for the following analyte: Atrazine. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: PMS-230-082418 (460-163302-21), PMS-230-082418 (460-163302-21[MS]) and PMS-230-082418 (460-163302-21[MSD]). These results have been reported and qualified.

2,4,6-Tribromophenol (Surr) failed the surrogate recovery criteria high for OB-20B-082318 (460-163302-1), CMS-50-082318 (460-163302-5), LCS 460-547574/2-A, LCS 460-547599/2-A, LCS 460-548149/2-A, CMS-50-082318MS (460-163302-5MS), 460-163112-E-9-C MSD, and CMS-50-082318MSD (460-163302-5MSD).

Several analytes failed the recovery criteria low for the matrix spike (MS) of sample 460-163112-9 in batch 460-547625. 2-Methylphenol, 3,3'-Dichlorobenzidine and Caprolactam failed the recovery criteria low for the matrix spike duplicate (MSD) of sample 460-163112-9 in batch 460-547625.

2-Methylphenol and 3-Nitroaniline failed the recovery criteria low for the MS and MSD of sample PMS-230-082418 (460-163302-21) in batch 460-548257.

2-Methylphenol and Hexachlorobutadiene failed the recovery criteria low for the MS and MSD of sample CMS-50-082318 (460-163302-5) in batch 460-547615.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

Job ID: 460-163302-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

SEMIVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM)

Samples OB-20B-082318 (460-163302-1), OB-20A-082318 (460-163302-2), RW-6-082318 (460-163302-3), RW-6A-082318 (460-163302-4), CMS-50-082318 (460-163302-5), OB-30C-082318 (460-163302-6), CMS-100-082318 (460-163302-7), CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9), SC-02-082318 (460-163302-10), OB-5-082318 (460-163302-11), Dup-02-082318 (460-163302-12), OB-12-082318 (460-163302-13), OB-2-082318 (460-163302-14), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), PMS-50-082418 (460-163302-19), PMS-180-082418 (460-163302-20), PMS-230-082418 (460-163302-21), SC-01-082418 (460-163302-22), FB-03-082418 (460-163302-23) and RW-5-082418 (460-163302-24) were analyzed for semivolatile organic compounds - Selected Ion Mode (SIM) in accordance with EPA Method 8270C SIM DKQP. The samples were prepared on 08/26/2018 and 08/28/2018 and analyzed on 08/27/2018 and 08/29/2018.

The CCV analyzed in batch 460-547693 was outside the method criteria for the following analytes: Benzo[a]pyrene, Benzo[b]fluoranthene and Dibenz(a,h)anthracene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The CCV analyzed in batch 460-547710 was outside the method criteria for the following analytes: Hexachlorobenzene and Dibenz(a,h)anthracene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The CCV associated with batch 460-548270 recovered above the upper control limit for Dibenz(a,h)anthracene and Pentachlorophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The CCV analyzed in 460-547929 was outside the method criteria for the following analyte: Hexachlorobenzene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The LCS and LCSD for preparation batch 460-547574 and analytical batch 460-547929 recovered outside control limits for the following analytes: Benzo[a]anthracene, Benzo[a]pyrene, Bis(2-chloroethyl)ether, Dibenz(a,h)anthracene, Hexachlorobenzene and Indeno[1,2,3-cd]pyrene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. Dibenz(a,h)anthracene, Hexachlorobenzene and Indeno[1,2,3-cd]pyrene exceeded the RPD limit.

The LCS for preparation batch 460-547599 and analytical batch 460-547929 recovered outside control limits for the following analytes: Dibenz(a,h)anthracene, Hexachlorobenzene and Indeno[1,2,3-cd]pyrene. These analytes were biased high in the LCS; therefore, the data have been reported.

The LCSD for preparation batch 460-547599 and analytical batch 460-547710 recovered outside control limits for the following analyte: Hexachlorobenzene. This analyte was biased high in the LCSD; therefore, the data have been reported.

The LCS and LCSD for preparation batch 460-548149 and analytical batch 460-548270 recovered outside control limits for the following analyte: Dibenz(a,h)anthracene. This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 460-547599 and analytical batch 460-547710 recovered outside control limits for the following analyte: Indeno[1,2,3-cd]pyrene.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

1,4 DIOXANE BY 8270D SIM, ISOTOPE DILUTION

Samples OB-20B-082318 (460-163302-1), OB-20A-082318 (460-163302-2), RW-6-082318 (460-163302-3), RW-6A-082318 (460-163302-4), CMS-50-082318 (460-163302-5), OB-30C-082318 (460-163302-6), CMS-100-082318 (460-163302-7), CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9), SC-02-082318 (460-163302-10), OB-5-082318 (460-163302-11), Dup-02-082318

Job ID: 460-163302-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

(460-163302-12), OB-12-082318 (460-163302-13), OB-2-082318 (460-163302-14), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), PMS-50-082418 (460-163302-19), PMS-180-082418 (460-163302-20), PMS-230-082418 (460-163302-21), SC-01-082418 (460-163302-22), FB-03-082418 (460-163302-23) and RW-5-082418 (460-163302-24) were analyzed for 1,4 Dioxane by 8270D SIM, Isotope Dilution in accordance with EPA SW-846 Method 8270D SIM. The samples were prepared on 08/27/2018 and analyzed on 08/28/2018 and 08/29/2018.

1,4-Dioxane failed the recovery criteria low for the MS and MSD of sample PMS-230-082418 (460-163302-21) in batch 460-548328.

Refer to the QC report for details.

Sample PMS-230-082418 (460-163302-21)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the 1,4 Dioxane analysis.

All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS) - SELECTED ION MODE (SIM) DKQP

Samples OB-20A-082318 (460-163302-2), OB-30C-082318 (460-163302-6), SC-02-082318 (460-163302-10), OB-5-082318 (460-163302-11), Dup-02-082318 (460-163302-12), OB-12-082318 (460-163302-13), OB-2-082318 (460-163302-14), TB-03-082418 (460-163302-15), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), PMS-50-082418 (460-163302-19), PMS-180-082418 (460-163302-20), PMS-230-082418 (460-163302-21), FB-03-082418 (460-163302-23) and RW-5-082418 (460-163302-24) were analyzed for volatile organic compounds (GC-MS) - Selected Ion Mode (SIM) DKQP in accordance with EPA SW-846 Method 8260C SIM DKQP. The samples were analyzed on 08/30/2018 and 08/31/2018.

The continuing calibration verification (CCV) associated with batch 460-548540 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detect for the affected analyte; therefore, the data have been reported.

Refer to the QC report for details.

No other difficulties were encountered during the VOA SIM DKQP analysis.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS) DKQP

Samples OB-20B-082318 (460-163302-1), OB-20A-082318 (460-163302-2), RW-6-082318 (460-163302-3), RW-6A-082318 (460-163302-4), CMS-50-082318 (460-163302-5), OB-30C-082318 (460-163302-6), CMS-100-082318 (460-163302-7), CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9), SC-02-082318 (460-163302-10), OB-5-082318 (460-163302-11), Dup-02-082318 (460-163302-12), OB-12-082318 (460-163302-13), OB-2-082318 (460-163302-14), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), PMS-50-082418 (460-163302-19), PMS-180-082418 (460-163302-20), PMS-230-082418 (460-163302-21), SC-01-082418 (460-163302-22), FB-03-082418 (460-163302-23) and RW-5-082418 (460-163302-24) were analyzed for polychlorinated biphenyls (PCBs) DKQP in accordance with EPA SW-846 Method 8082A DKQP. The samples were prepared on 08/27/2018, 08/28/2018 and 08/29/2018 and analyzed on 08/29/2018, 08/30/2018 and 08/31/2018.

Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for preparation batch 460-548017 and analytical batch 460-548386, sample 460-163352-6. The associated laboratory control sample (LCS) met acceptance criteria.

Refer to the QC report for details.

The following samples required a copper clean-up to reduce matrix interferences caused by sulfur: CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9), OB-5-082318 (460-163302-11), PMS-230-082418 (460-163302-21), PMS-230-082418 (460-163302-21[MS]) and PMS-230-082418 (460-163302-21[MSD]).

No other difficulties were encountered during the PCBs analysis.

Job ID: 460-163302-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

All other quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICP/MS)

Samples OB-20B-082318 (460-163302-1), OB-20A-082318 (460-163302-2), RW-6-082318 (460-163302-3), RW-6A-082318 (460-163302-4), CMS-50-082318 (460-163302-5), OB-30C-082318 (460-163302-6), CMS-100-082318 (460-163302-7), CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9), SC-02-082318 (460-163302-10), OB-5-082318 (460-163302-11), Dup-02-082318 (460-163302-12), OB-12-082318 (460-163302-13), OB-2-082318 (460-163302-14), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), PMS-50-082418 (460-163302-19), PMS-180-082418 (460-163302-20), PMS-230-082418 (460-163302-21), SC-01-082418 (460-163302-22), FB-03-082418 (460-163302-23) and RW-5-082418 (460-163302-24) were analyzed for Dissolved Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared on 08/30/2018 and 09/14/2018 and analyzed on 08/30/2018, 08/31/2018 and 09/14/2018.

Antimony failed the recovery criteria low for the MS of sample CMS-50-082318 (460-163302-5) in batch 460-548548. Several analytes failed the recovery criteria high.

Sodium failed the recovery criteria low for the MS of sample PMS-230-082418 (460-163302-21) in batch 460-551988. Calcium, Magnesium, Manganese and Selenium failed the recovery criteria high.

Refer to the QC report for details.

The field blank FB-03-082418 (460-163302-23) contains sodium greater than the reporting limit (RL). This was confirmed by analysis of the undigested sample bottle, therefore the result is reported.

Samples OB-20B-082318 (460-163302-1)[2X], OB-20A-082318 (460-163302-2)[2X], RW-6-082318 (460-163302-3)[2X], RW-6A-082318 (460-163302-4)[10X], RW-6A-082318 (460-163302-4)[2X], CMS-50-082318 (460-163302-5)[2X], OB-30C-082318 (460-163302-6)[2X], CMS-100-082318 (460-163302-7)[2X], CMS-160-082318 (460-163302-8)[2X], CMS-275-082318 (460-163302-9)[2X], SC-02-082318 (460-163302-10)[2X], OB-5-082318 (460-163302-11)[2X], Dup-02-082318 (460-163302-12)[2X], OB-12-082318 (460-163302-13)[2X], OB-2-082318 (460-163302-14)[2X], RW-13 (71-91)-082418 (460-163302-16)[2X], OB-30A-082418 (460-163302-17)[2X], Dup-03-082418 (460-163302-18)[2X], PMS-50-082418 (460-163302-19)[2X], PMS-180-082418 (460-163302-20)[2X], PMS-230-082418 (460-163302-21)[2X], SC-01-082418 (460-163302-22)[2X], FB-03-082418 (460-163302-23)[2X] and RW-5-082418 (460-163302-24)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly

No other difficulties were encountered during the Dissolved Metals analysis.

All other quality control parameters were within the acceptance limits.

METALS (ICP/MS)

Samples OB-20B-082318 (460-163302-1), OB-20A-082318 (460-163302-2), RW-6-082318 (460-163302-3), RW-6A-082318 (460-163302-4), CMS-50-082318 (460-163302-5), OB-30C-082318 (460-163302-6), CMS-100-082318 (460-163302-7), CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9), SC-02-082318 (460-163302-10), OB-5-082318 (460-163302-11), Dup-02-082318 (460-163302-12), OB-12-082318 (460-163302-13), OB-2-082318 (460-163302-14), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), PMS-50-082418 (460-163302-19), PMS-180-082418 (460-163302-20), PMS-230-082418 (460-163302-21), SC-01-082418 (460-163302-22), FB-03-082418 (460-163302-23) and RW-5-082418 (460-163302-24) were analyzed for Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared on 08/30/2018, 09/01/2018 and 09/06/2018 and analyzed on 08/30/2018, 08/31/2018, 09/05/2018 and 09/08/2018.

The method blank for preparation batch 460-548512 and analytical batch 460-548687 contained Lead above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction of samples was not performed. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Several analytes failed the recovery criteria high for the MS of sample PMS-230-082418 (460-163302-21) in batch 460-549568.

Calcium, Iron, Magnesium and Sodium failed the recovery criteria low for the MS of sample CMS-50-082318 (460-163302-5) in batch 460-548831.

Job ID: 460-163302-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Magnesium and Sodium failed the recovery criteria low for the MS of sample 460-163407-1 in batch 460-548986. Calcium failed the recovery criteria high.

Refer to the QC report for details.

Samples CMS-160-082318 (460-163302-8)[10X], CMS-275-082318 (460-163302-9)[10X] and PMS-180-082418 (460-163302-20)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Metals DKQP analysis.

All other quality control parameters were within the acceptance limits.

MERCURY DKQP

Samples OB-20B-082318 (460-163302-1), OB-20A-082318 (460-163302-2), RW-6-082318 (460-163302-3), RW-6A-082318 (460-163302-4), CMS-50-082318 (460-163302-5), OB-30C-082318 (460-163302-6), CMS-100-082318 (460-163302-7), CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9), SC-02-082318 (460-163302-10), OB-5-082318 (460-163302-11), Dup-02-082318 (460-163302-12), OB-12-082318 (460-163302-13), OB-2-082318 (460-163302-14), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), PMS-50-082418 (460-163302-19), PMS-180-082418 (460-163302-20), PMS-230-082418 (460-163302-21), SC-01-082418 (460-163302-22), FB-03-082418 (460-163302-23) and RW-5-082418 (460-163302-24) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 08/29/2018 and 08/30/2018.

No difficulties were encountered during the dissolved Hg analysis.

All quality control parameters were within the acceptance limits.

MERCURY DKQP

Samples OB-20B-082318 (460-163302-1), OB-20A-082318 (460-163302-2), RW-6-082318 (460-163302-3), RW-6A-082318 (460-163302-4), CMS-50-082318 (460-163302-5), OB-30C-082318 (460-163302-6), CMS-100-082318 (460-163302-7), CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9), SC-02-082318 (460-163302-10), OB-5-082318 (460-163302-11), Dup-02-082318 (460-163302-12), OB-12-082318 (460-163302-13), OB-2-082318 (460-163302-14), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), PMS-50-082418 (460-163302-19), PMS-180-082418 (460-163302-20), PMS-230-082418 (460-163302-21), SC-01-082418 (460-163302-22), FB-03-082418 (460-163302-23) and RW-5-082418 (460-163302-24) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 08/29/2018.

No difficulties were encountered during the Hg analysis.

All quality control parameters were within the acceptance limits.

ANIONS

Samples OB-20B-082318 (460-163302-1), OB-20A-082318 (460-163302-2), RW-6-082318 (460-163302-3), RW-6A-082318 (460-163302-4), CMS-50-082318 (460-163302-5), OB-30C-082318 (460-163302-6), CMS-100-082318 (460-163302-7), CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9), SC-02-082318 (460-163302-10), OB-5-082318 (460-163302-11), Dup-02-082318 (460-163302-12), OB-12-082318 (460-163302-13), OB-2-082318 (460-163302-14), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), PMS-50-082418 (460-163302-19), PMS-180-082418 (460-163302-20), PMS-230-082418 (460-163302-21), SC-01-082418 (460-163302-22), FB-03-082418 (460-163302-23) and RW-5-082418 (460-163302-24) were analyzed for anions in accordance with EPA SW-846 Method 9056. The samples were analyzed on 08/26/2018, 08/27/2018 and 08/28/2018.

Chloride failed the recovery criteria low for the MS and MSD of sample PMS-230-082418 (460-163302-21) in batch 460-547726.

Chloride failed the recovery criteria low for the MS and MSD of sample CMS-50-082318 (460-163302-5) in batch 460-547825.

Job ID: 460-163302-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Refer to the QC report for details.

The following samples were diluted to bring the concentration of Chloride within the calibration range: RW-6-082318 (460-163302-3), CMS-50-082318 (460-163302-5), CMS-50-082318 (460-163302-5[MS]), CMS-50-082318 (460-163302-5[MSD]), OB-30C-082318 (460-163302-6), CMS-100-082318 (460-163302-7), CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9), OB-5-082318 (460-163302-11), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), 460-163302-E-5 DU, PMS-230-082418 (460-163302-21), PMS-230-082418 (460-163302-21[MS]), PMS-230-082418 (460-163302-21[MSD]) and (460-163302-E-21 DU). . Elevated reporting limits (RLs) are provided.

The following sample was diluted to bring the concentration of Sulfate within the calibration range: SC-02-082318 (460-163302-10). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the anions analysis.

All other quality control parameters were within the acceptance limits.

ALKALINITY

Samples OB-20B-082318 (460-163302-1), OB-20A-082318 (460-163302-2), RW-6-082318 (460-163302-3), RW-6A-082318 (460-163302-4), CMS-50-082318 (460-163302-5), OB-30C-082318 (460-163302-6), CMS-100-082318 (460-163302-7), CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9), SC-02-082318 (460-163302-10), OB-5-082318 (460-163302-11), Dup-02-082318 (460-163302-12), OB-12-082318 (460-163302-13), OB-2-082318 (460-163302-14), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), PMS-50-082418 (460-163302-19), PMS-180-082418 (460-163302-20), PMS-230-082418 (460-163302-21), SC-01-082418 (460-163302-22), FB-03-082418 (460-163302-23) and RW-5-082418 (460-163302-24) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/26/2018.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

TOTAL CYANIDE

Samples OB-20B-082318 (460-163302-1), OB-20A-082318 (460-163302-2), RW-6-082318 (460-163302-3), RW-6A-082318 (460-163302-4), CMS-50-082318 (460-163302-5), OB-30C-082318 (460-163302-6), CMS-100-082318 (460-163302-7), CMS-160-082318 (460-163302-8), CMS-275-082318 (460-163302-9), SC-02-082318 (460-163302-10), OB-5-082318 (460-163302-11), Dup-02-082318 (460-163302-12), OB-12-082318 (460-163302-13), OB-2-082318 (460-163302-14), RW-13 (71-91)-082418 (460-163302-16), OB-30A-082418 (460-163302-17), Dup-03-082418 (460-163302-18), PMS-50-082418 (460-163302-19), PMS-180-082418 (460-163302-20), PMS-230-082418 (460-163302-21), SC-01-082418 (460-163302-22), FB-03-082418 (460-163302-23) and RW-5-082418 (460-163302-24) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B (DKQP). The samples were prepared on 08/30/2018 and 08/31/2018 and analyzed on 08/31/2018.

The laboratory control sample (LCS) for preparation batch 548650 recovery outside control limits for the following analytes: Cyanide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Cyanide, Total failed the recovery criteria high for the MS and MSD of sample OB-5-082318 (460-163302-11) in batch 460-548949.

Cyanide, Total failed the recovery criteria high for the MS of sample CMS-50-082318 (460-163302-5) in batch 460-548949.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the cyanide analysis.

All other quality control parameters were within the acceptance limits.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-20B-082318 — Lab Sample ID: 460-163302-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.59		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Naphthalene	1.1	J	10	1.1	ug/L	1		8270D	Total/NA
Chloride	2.19		0.12	0.078	mg/L	1		9056A	Total/NA
Arsenic	1.1	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	62.2		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	21.5		4.0	1.3	ug/L	2		6020B	Total/NA
Copper	4.2		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	5820		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	4.2		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.43	J B	1.2	0.37	ug/L	2		6020B	Total/NA
Aluminum	26.1	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	4320		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	8210		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2430		200	64.9	ug/L	2		6020B	Total/NA
Calcium	40400		200	67.6	ug/L	2		6020B	Total/NA
Iron	31500		120	45.7	ug/L	2		6020B	Total/NA
Barium	36.5		4.0	1.1	ug/L	2		6020B	Dissolved
Cobalt	18.4		4.0	1.3	ug/L	2		6020B	Dissolved
Manganese	5660		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	3.4	J	4.0	1.3	ug/L	2		6020B	Dissolved
Sodium	3320		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	6760		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2230		200	64.9	ug/L	2		6020B	Dissolved
Calcium	37600		200	67.6	ug/L	2		6020B	Dissolved
Iron	3840		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	196		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	196		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-20A-082318 — Lab Sample ID: 460-163302-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.28		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	2.45		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	1.65		0.60	0.33	mg/L	1		9056A	Total/NA
Arsenic	0.77	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	132		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	3.1	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	352		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.9	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.41	J B	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.75	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	1.4	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	11.6	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	46.0		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3750		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2490		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2090		200	64.9	ug/L	2		6020B	Total/NA
Calcium	19400		200	67.6	ug/L	2		6020B	Total/NA
Iron	19900		120	45.7	ug/L	2		6020B	Total/NA
Barium	97.1		4.0	1.1	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-20A-082318 (Continued) — Lab Sample ID: 460-163302-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	311		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	1.3	J	4.0	1.3	ug/L	2		6020B	Dissolved
Sodium	2800		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	1980		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1860		200	64.9	ug/L	2		6020B	Dissolved
Calcium	17600		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	96.1		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	96.1		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-6-082318 — Lab Sample ID: 460-163302-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.1		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Sulfate	1.21		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	7.50	D	0.60	0.39	mg/L	5		9056A	Total/NA
Arsenic	1.1	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	350		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	2.9	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	4.1		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	5370		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.3	J	4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	0.69	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	18.1	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	9310		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	12200		200	65.7	ug/L	2		6020B	Total/NA
Potassium	3000		200	64.9	ug/L	2		6020B	Total/NA
Calcium	69200		200	67.6	ug/L	2		6020B	Total/NA
Iron	41200		120	45.7	ug/L	2		6020B	Total/NA
Barium	228		4.0	1.1	ug/L	2		6020B	Dissolved
Cobalt	2.2	J	4.0	1.3	ug/L	2		6020B	Dissolved
Manganese	5370		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	7970		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	10400		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2840		200	64.9	ug/L	2		6020B	Dissolved
Calcium	66900		200	67.6	ug/L	2		6020B	Dissolved
Iron	4790		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	301		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	301		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-6A-082318 — Lab Sample ID: 460-163302-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.1		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	3.50		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	0.64		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	35.2		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	9.8		4.0	1.3	ug/L	2		6020B	Total/NA
Copper	5.2		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	9800		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	2.2	J	4.0	1.3	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW-6A-082318 (Continued) — Lab Sample ID: 460-163302-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.94	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	2.1	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	7.2	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	48.0		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	10500		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	18800		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2440		200	64.9	ug/L	2		6020B	Total/NA
Calcium	72400		200	67.6	ug/L	2		6020B	Total/NA
Iron	13200		120	45.7	ug/L	2		6020B	Total/NA
Barium	24.2		4.0	1.1	ug/L	2		6020B	Dissolved
Cobalt	7.3		4.0	1.3	ug/L	2		6020B	Dissolved
Manganese	11300		40.0	13.5	ug/L	10		6020B	Dissolved
Nickel	1.6	J	4.0	1.3	ug/L	2		6020B	Dissolved
Sodium	7170		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	17100		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2340		200	64.9	ug/L	2		6020B	Dissolved
Calcium	73300		200	67.6	ug/L	2		6020B	Dissolved
Iron	1060		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	306		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	306		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: CMS-50-082318 — Lab Sample ID: 460-163302-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.34		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Sulfate	6.63		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	184	D	6.00	3.90	mg/L	50		9056A	Total/NA
Barium	66.3		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	3.1	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	776		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.42	J	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	1.5	J	2.0	0.62	ug/L	2		6020B	Total/NA
Zinc	326		16.0	5.4	ug/L	2		6020B	Total/NA
Sodium	92400		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	14700		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2280		200	64.9	ug/L	2		6020B	Total/NA
Calcium	51000		200	67.6	ug/L	2		6020B	Total/NA
Iron	14500		120	45.7	ug/L	2		6020B	Total/NA
Barium	47.5	F1	4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	671		8.0	2.7	ug/L	2		6020B	Dissolved
Zinc	81.2		16.0	5.4	ug/L	2		6020B	Dissolved
Sodium	77800		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	13300		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2060		200	64.9	ug/L	2		6020B	Dissolved
Calcium	45200		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	146		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	146		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-30C-082318 — Lab Sample ID: 460-163302-6

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-30C-082318 (Continued) — Lab Sample ID: 460-163302-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.31		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Sulfate	28.5		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	33.6	D	1.20	0.78	mg/L	10		9056A	Total/NA
Arsenic	0.95	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	24.4		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	1.3	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	7.9		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	109		8.0	2.7	ug/L	2		6020B	Total/NA
Lead	0.46	J B	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.62	J	2.0	0.62	ug/L	2		6020B	Total/NA
Selenium	2.7	J	10.0	0.69	ug/L	2		6020B	Total/NA
Vanadium	5.2		4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	224		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	7210		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	19000		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1850		200	64.9	ug/L	2		6020B	Total/NA
Calcium	48800		200	67.6	ug/L	2		6020B	Total/NA
Iron	375		120	45.7	ug/L	2		6020B	Total/NA
Arsenic	0.79	J	2.0	0.77	ug/L	2		6020B	Dissolved
Barium	15.5		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	77.8		8.0	2.7	ug/L	2		6020B	Dissolved
Selenium	2.3	J	10.0	0.69	ug/L	2		6020B	Dissolved
Vanadium	3.8	J	4.0	1.2	ug/L	2		6020B	Dissolved
Sodium	5390		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	16000		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1560		200	64.9	ug/L	2		6020B	Dissolved
Calcium	42800		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	138		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	138		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: CMS-100-082318 — Lab Sample ID: 460-163302-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.34		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Sulfate	5.21		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	185	D	6.00	3.90	mg/L	50		9056A	Total/NA
Barium	68.9		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.3	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	792		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.6	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.44	J B	1.2	0.37	ug/L	2		6020B	Total/NA
Zinc	1080		16.0	5.4	ug/L	2		6020B	Total/NA
Sodium	98600		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	16300		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2290		200	64.9	ug/L	2		6020B	Total/NA
Calcium	49300		200	67.6	ug/L	2		6020B	Total/NA
Iron	21200		120	45.7	ug/L	2		6020B	Total/NA
Barium	50.2		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	720		8.0	2.7	ug/L	2		6020B	Dissolved
Zinc	523		16.0	5.4	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: CMS-100-082318 (Continued) — Lab Sample ID: 460-163302-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	80500		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	13800		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2140		200	64.9	ug/L	2		6020B	Dissolved
Calcium	47200		200	67.6	ug/L	2		6020B	Dissolved
Iron	617		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	147		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	147		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: CMS-160-082318 — Lab Sample ID: 460-163302-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.33		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Sulfate	2.99		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	203	D	6.00	3.90	mg/L	50		9056A	Total/NA
Barium	77.1		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	1.9	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	5.8		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	869		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.8	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	3.4	B	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.64	J	2.0	0.62	ug/L	2		6020B	Total/NA
Zinc	3440		80.0	26.9	ug/L	10		6020B	Total/NA
Aluminum	17.6	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	109000		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	17400		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2610		200	64.9	ug/L	2		6020B	Total/NA
Calcium	54400		200	67.6	ug/L	2		6020B	Total/NA
Iron	30200		120	45.7	ug/L	2		6020B	Total/NA
Barium	51.9		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	798		8.0	2.7	ug/L	2		6020B	Dissolved
Zinc	1420		16.0	5.4	ug/L	2		6020B	Dissolved
Sodium	89800		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	14800		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2530		200	64.9	ug/L	2		6020B	Dissolved
Calcium	52200		200	67.6	ug/L	2		6020B	Dissolved
Iron	969		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	162		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	162		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: CMS-275-082318 — Lab Sample ID: 460-163302-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.40		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Sulfate	0.54	J	0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	74.4	D	2.40	1.56	mg/L	20		9056A	Total/NA
Arsenic	1.1	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	141		4.0	1.1	ug/L	2		6020B	Total/NA
Cadmium	3.2		2.0	0.61	ug/L	2		6020B	Total/NA
Chromium	27.1		4.0	1.3	ug/L	2		6020B	Total/NA
Copper	44.4		4.0	1.9	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: CMS-275-082318 (Continued) — Lab Sample ID: 460-163302-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	1240		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	8.7		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	44.4	B	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.98	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	1.5	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	4730		80.0	26.9	ug/L	10		6020B	Total/NA
Aluminum	57.1		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	58900		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	20200		200	65.7	ug/L	2		6020B	Total/NA
Potassium	7050		200	64.9	ug/L	2		6020B	Total/NA
Calcium	83400		200	67.6	ug/L	2		6020B	Total/NA
Iron	22700		120	45.7	ug/L	2		6020B	Total/NA
Barium	78.4		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	977		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	4.2		4.0	1.3	ug/L	2		6020B	Dissolved
Zinc	765		16.0	5.4	ug/L	2		6020B	Dissolved
Sodium	44000		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	16500		200	65.7	ug/L	2		6020B	Dissolved
Potassium	6040		200	64.9	ug/L	2		6020B	Dissolved
Calcium	71400		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	334		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	334		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SC-02-082318 — Lab Sample ID: 460-163302-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.1		5.0	5.0	ug/L	1		8260C	Total/NA
Carbon disulfide	0.29	J	1.0	0.16	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.29		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	2.83		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate - DL	37.7	D	3.00	1.66	mg/L	5		9056A	Total/NA
Barium	61.0		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	2.8	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	23.9		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	50.2		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	5.5		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	4.0	B	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	2.2		2.0	0.62	ug/L	2		6020B	Total/NA
Selenium	0.83	J	10.0	0.69	ug/L	2		6020B	Total/NA
Zinc	110		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	219		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	8460		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	18700		200	65.7	ug/L	2		6020B	Total/NA
Potassium	5210		200	64.9	ug/L	2		6020B	Total/NA
Calcium	75400		200	67.6	ug/L	2		6020B	Total/NA
Iron	852		120	45.7	ug/L	2		6020B	Total/NA
Barium	47.1		4.0	1.1	ug/L	2		6020B	Dissolved
Copper	11.0		4.0	1.9	ug/L	2		6020B	Dissolved
Nickel	4.2		4.0	1.3	ug/L	2		6020B	Dissolved
Zinc	78.0		16.0	5.4	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: SC-02-082318 (Continued) — Lab Sample ID: 460-163302-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	6360		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	14100		200	65.7	ug/L	2		6020B	Dissolved
Potassium	4360		200	64.9	ug/L	2		6020B	Dissolved
Calcium	64300		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	255		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	255		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-5-082318 — Lab Sample ID: 460-163302-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.22	J	1.0	0.16	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.32		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Sulfate	15.2		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	80.1	D	3.00	1.95	mg/L	25		9056A	Total/NA
Barium	26.1		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	6.8		4.0	1.3	ug/L	2		6020B	Total/NA
Copper	3.8	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	2010		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	2.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Sodium	35100		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	32400		200	65.7	ug/L	2		6020B	Total/NA
Potassium	3400		200	64.9	ug/L	2		6020B	Total/NA
Calcium	64900		200	67.6	ug/L	2		6020B	Total/NA
Iron	12200		120	45.7	ug/L	2		6020B	Total/NA
Barium	19.3		4.0	1.1	ug/L	2		6020B	Dissolved
Cobalt	4.4		4.0	1.3	ug/L	2		6020B	Dissolved
Manganese	1810		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	1.6	J	4.0	1.3	ug/L	2		6020B	Dissolved
Sodium	28900		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	27300		200	65.7	ug/L	2		6020B	Dissolved
Potassium	3170		200	64.9	ug/L	2		6020B	Dissolved
Calcium	61300		200	67.6	ug/L	2		6020B	Dissolved
Iron	893		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	271		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	271		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: Dup-02-082318 — Lab Sample ID: 460-163302-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11		5.0	5.0	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.25		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	1.11		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	10.7		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	2.3	J	4.0	1.1	ug/L	2		6020B	Total/NA
Copper	9.4		4.0	1.9	ug/L	2		6020B	Total/NA
Aluminum	17.7	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	2780		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2680		200	65.7	ug/L	2		6020B	Total/NA
Potassium	583		200	64.9	ug/L	2		6020B	Total/NA
Calcium	6590		200	67.6	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Dup-02-082318 (Continued) — Lab Sample ID: 460-163302-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	1.5	J	4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	1950		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2060		200	65.7	ug/L	2		6020B	Dissolved
Potassium	499		200	64.9	ug/L	2		6020B	Dissolved
Calcium	5740		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	21.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	21.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-12-082318 — Lab Sample ID: 460-163302-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.37	J	1.0	0.32	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.28		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	1.19		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	10.7		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	2.3	J	4.0	1.1	ug/L	2		6020B	Total/NA
Copper	4.4		4.0	1.9	ug/L	2		6020B	Total/NA
Antimony	0.67	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	32.5	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	2710		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2670		200	65.7	ug/L	2		6020B	Total/NA
Potassium	549		200	64.9	ug/L	2		6020B	Total/NA
Calcium	6320		200	67.6	ug/L	2		6020B	Total/NA
Barium	1.6	J	4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	1880		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	1990		200	65.7	ug/L	2		6020B	Dissolved
Potassium	472		200	64.9	ug/L	2		6020B	Dissolved
Calcium	5470		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	21.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	21.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-2-082318 — Lab Sample ID: 460-163302-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.25		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	1.72		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	11.3		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	5.1		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	7.4		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	8.3		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.63	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	80.6		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3840		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	4550		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1320		200	64.9	ug/L	2		6020B	Total/NA
Calcium	11600		200	67.6	ug/L	2		6020B	Total/NA
Iron	231		120	45.7	ug/L	2		6020B	Total/NA
Barium	4.4		4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	2740		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3500		200	65.7	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-2-082318 (Continued) — Lab Sample ID: 460-163302-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1180		200	64.9	ug/L	2		6020B	Dissolved
Calcium	10500		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	37.8		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	37.8		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: TB-03-082418 — Lab Sample ID: 460-163302-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.36	J	1.0	0.32	ug/L	1		8260C	Total/NA

Client Sample ID: RW-13 (71-91)-082418 — Lab Sample ID: 460-163302-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.50		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Sulfate	19.3		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	40.6	D	2.40	1.56	mg/L	20		9056A	Total/NA
Barium	13.5		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	1.5	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	4.4		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	16.0		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	0.62	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	94.0		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	17000		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	17000		200	65.7	ug/L	2		6020B	Total/NA
Potassium	3270		200	64.9	ug/L	2		6020B	Total/NA
Calcium	44600		200	67.6	ug/L	2		6020B	Total/NA
Iron	209		120	45.7	ug/L	2		6020B	Total/NA
Barium	11.1		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	10		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	12900		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	13300		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2800		200	64.9	ug/L	2		6020B	Dissolved
Calcium	39300		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	129		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	129		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: OB-30A-082418 — Lab Sample ID: 460-163302-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.34		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Bis(2-chloroethyl)ether	0.031		0.030	0.026	ug/L	1		8270D SIM	Total/NA
Hexachlorobenzene	0.027	*	0.020	0.013	ug/L	1		8270D SIM	Total/NA
Sulfate	12.8		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	21.6	D	1.20	0.78	mg/L	10		9056A	Total/NA
Barium	31.7		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	6.5		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	6.5	J	8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	2.0	J	4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	1.3	J	2.0	0.62	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-30A-082418 (Continued) — Lab Sample ID: 460-163302-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	52.2		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	26100		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	4730		200	65.7	ug/L	2		6020B	Total/NA
Potassium	3440		200	64.9	ug/L	2		6020B	Total/NA
Calcium	20600		200	67.6	ug/L	2		6020B	Total/NA
Iron	694		120	45.7	ug/L	2		6020B	Total/NA
Barium	24.2		4.0	1.1	ug/L	2		6020B	Dissolved
Copper	2.5	J	4.0	1.9	ug/L	2		6020B	Dissolved
Sodium	18700		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3490		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2870		200	64.9	ug/L	2		6020B	Dissolved
Calcium	17300		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	77.5		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	77.5		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: Dup-03-082418 — Lab Sample ID: 460-163302-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.45		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Sulfate	19.2		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	38.5	D	2.40	1.56	mg/L	20		9056A	Total/NA
Barium	13.6		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	1.6	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	9.9		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	15.9		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.5	J	4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	0.67	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	1.3	J	4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	92.7		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	16900		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	16900		200	65.7	ug/L	2		6020B	Total/NA
Potassium	3290		200	64.9	ug/L	2		6020B	Total/NA
Calcium	43700		200	67.6	ug/L	2		6020B	Total/NA
Iron	202		120	45.7	ug/L	2		6020B	Total/NA
Barium	9.6		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	9.5		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	12700		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	13200		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2820		200	64.9	ug/L	2		6020B	Dissolved
Calcium	39100		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	129		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	129		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PMS-50-082418 — Lab Sample ID: 460-163302-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	0.51	J	1.0	0.32	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.41		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	1.71		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	3.70		0.60	0.33	mg/L	1		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PMS-50-082418 (Continued) — Lab Sample ID: 460-163302-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	14.0		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	4.0		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	15.3		8.0	2.7	ug/L	2		6020B	Total/NA
Lead	1.7		1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.63	J	2.0	0.62	ug/L	2		6020B	Total/NA
Zinc	1020		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	120		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	2840		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	1640		200	65.7	ug/L	2		6020B	Total/NA
Potassium	530		200	64.9	ug/L	2		6020B	Total/NA
Calcium	5680		200	67.6	ug/L	2		6020B	Total/NA
Iron	615		120	45.7	ug/L	2		6020B	Total/NA
Barium	10.6		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	9.9		8.0	2.7	ug/L	2		6020B	Dissolved
Zinc	907		16.0	5.4	ug/L	2		6020B	Dissolved
Aluminum	15.4	J	40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	2030		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	1260		200	65.7	ug/L	2		6020B	Dissolved
Potassium	444		200	64.9	ug/L	2		6020B	Dissolved
Calcium	5020		200	67.6	ug/L	2		6020B	Dissolved
Iron	78.0	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	21.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	21.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PMS-180-082418 — Lab Sample ID: 460-163302-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.44	J	1.0	0.26	ug/L	1		8260C	Total/NA
1,3-Dichlorobenzene	0.34	J	1.0	0.34	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	1.5		1.0	0.76	ug/L	1		8260C	Total/NA
Benzene	10		1.0	0.43	ug/L	1		8260C	Total/NA
Chlorobenzene	3.1		1.0	0.38	ug/L	1		8260C	Total/NA
Chloroethane	23		1.0	0.32	ug/L	1		8260C	Total/NA
Cyclohexane	1.4		1.0	0.32	ug/L	1		8260C	Total/NA
Isopropylbenzene	1.8		1.0	0.34	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.36	J	1.0	0.26	ug/L	1		8260C	Total/NA
Toluene	0.81	J	1.0	0.38	ug/L	1		8260C	Total/NA
1,4-Dioxane	21		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Naphthalene	1.4	J	10	1.1	ug/L	1		8270D	Total/NA
Chloride	3.77		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	0.63		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	548		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	5.0		4.0	1.3	ug/L	2		6020B	Total/NA
Copper	8.6		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	1370		8.0	2.7	ug/L	2		6020B	Total/NA
Lead	25.2		1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.69	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	8.9		4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	3290		160	53.8	ug/L	20		6020B	Total/NA
Aluminum	51.2		40.0	15.0	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PMS-180-082418 (Continued)

Lab Sample ID: 460-163302-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	9510		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	7030		200	65.7	ug/L	2		6020B	Total/NA
Potassium	3310		200	64.9	ug/L	2		6020B	Total/NA
Calcium	71700		200	67.6	ug/L	2		6020B	Total/NA
Iron	128000		120	45.7	ug/L	2		6020B	Total/NA
Barium	261		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	1050		8.0	2.7	ug/L	2		6020B	Dissolved
Zinc	241		16.0	5.4	ug/L	2		6020B	Dissolved
Sodium	6420		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	5110		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2760		200	64.9	ug/L	2		6020B	Dissolved
Calcium	58200		200	67.6	ug/L	2		6020B	Dissolved
Iron	17600		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	351		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	351		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PMS-230-082418

Lab Sample ID: 460-163302-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.90	J	1.0	0.43	ug/L	1		8260C	Total/NA
1,3-Dichlorobenzene	3.2		1.0	0.34	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	8.4		1.0	0.76	ug/L	1		8260C	Total/NA
Benzene	33		1.0	0.43	ug/L	1		8260C	Total/NA
Chlorobenzene	21		1.0	0.38	ug/L	1		8260C	Total/NA
Chloroethane	8.6		1.0	0.32	ug/L	1		8260C	Total/NA
Cyclohexane	2.9		1.0	0.32	ug/L	1		8260C	Total/NA
Isopropylbenzene	14		1.0	0.34	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.68	J	1.0	0.26	ug/L	1		8260C	Total/NA
Toluene	0.43	J	1.0	0.38	ug/L	1		8260C	Total/NA
Xylenes, Total	1.1	J	2.0	0.65	ug/L	1		8260C	Total/NA
1,4-Dioxane	82		0.40	0.032	ug/L	2		8270D SIM ID	Total/NA
Naphthalene	5.0	J	10	1.2	ug/L	1		8270D	Total/NA
Chloride - DL	10.3	D	0.48	0.31	mg/L	4		9056A	Total/NA
Arsenic	4.1		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	499		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	2.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Chromium	9.0		4.0	1.3	ug/L	2		6020B	Total/NA
Copper	13.2		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	1990		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	4.8		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	54.5		1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.80	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	4.0		4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	669		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	41.4		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	30200		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	11600		200	65.7	ug/L	2		6020B	Total/NA
Potassium	7700		200	64.9	ug/L	2		6020B	Total/NA
Calcium	96000		200	67.6	ug/L	2		6020B	Total/NA
Iron	134000		120	45.7	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PMS-230-082418 (Continued) — Lab Sample ID: 460-163302-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	126		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	1890		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	2.6	J	4.0	1.3	ug/L	2		6020B	Dissolved
Zinc	91.2		16.0	5.4	ug/L	2		6020B	Dissolved
Sodium	29500		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	11900		200	65.7	ug/L	2		6020B	Dissolved
Potassium	8030		200	64.9	ug/L	2		6020B	Dissolved
Calcium	91500		200	67.6	ug/L	2		6020B	Dissolved
Iron	5710		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	565		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	565		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SC-01-082418 — Lab Sample ID: 460-163302-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.45		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Benzo[a]anthracene	0.027	J	0.050	0.016	ug/L	1		8270D SIM	Total/NA
Naphthalene	4.5	J	10	1.1	ug/L	1		8270D	Total/NA
N-Nitrosodiphenylamine	1.1	J	10	0.89	ug/L	1		8270D	Total/NA
Chloride	1.97		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	0.62		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	361		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	2.6	J	4.0	1.3	ug/L	2		6020B	Total/NA
Chromium	7.3		4.0	1.3	ug/L	2		6020B	Total/NA
Copper	3.1	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	458		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	11.3		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	5.7		1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.72	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	3.2	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	56.1		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	57.7		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3670		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	3560		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1970		200	64.9	ug/L	2		6020B	Total/NA
Calcium	25600		200	67.6	ug/L	2		6020B	Total/NA
Iron	54600		120	45.7	ug/L	2		6020B	Total/NA
Barium	291		4.0	1.1	ug/L	2		6020B	Dissolved
Cobalt	2.1	J	4.0	1.3	ug/L	2		6020B	Dissolved
Manganese	434		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	9.0		4.0	1.3	ug/L	2		6020B	Dissolved
Zinc	44.5		16.0	5.4	ug/L	2		6020B	Dissolved
Sodium	2980		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3360		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1900		200	64.9	ug/L	2		6020B	Dissolved
Calcium	24400		200	67.6	ug/L	2		6020B	Dissolved
Iron	5970		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	152		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	152		5.0	5.0	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: FB-03-082418 — Lab Sample ID: 460-163302-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.8		1.0	0.32	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.26		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Barium	1.9	J	4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	247		200	75.7	ug/L	2		6020B	Dissolved

Client Sample ID: RW-5-082418 — Lab Sample ID: 460-163302-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	1.2		1.0	0.32	ug/L	1		8260C	Total/NA
1,4-Dioxane	6.8		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	2.45		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	22.7		0.60	0.33	mg/L	1		9056A	Total/NA
Arsenic	14.3		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	7.8		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	2.7	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	9.1		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	71.2		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	3.7	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	3.1		1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.84	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	2.6	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	63.2		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	1460		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	76100		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	915		200	65.7	ug/L	2		6020B	Total/NA
Potassium	99100		200	64.9	ug/L	2		6020B	Total/NA
Calcium	9560		200	67.6	ug/L	2		6020B	Total/NA
Iron	1990		120	45.7	ug/L	2		6020B	Total/NA
Arsenic	16.9		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	7.1		4.0	1.1	ug/L	2		6020B	Dissolved
Copper	4.4		4.0	1.9	ug/L	2		6020B	Dissolved
Nickel	2.9	J	4.0	1.3	ug/L	2		6020B	Dissolved
Vanadium	2.2	J	4.0	1.2	ug/L	2		6020B	Dissolved
Zinc	44.9		16.0	5.4	ug/L	2		6020B	Dissolved
Aluminum	296		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	71600		200	75.7	ug/L	2		6020B	Dissolved
Potassium	104000		200	64.9	ug/L	2		6020B	Dissolved
Calcium	7520		200	67.6	ug/L	2		6020B	Dissolved
Alkalinity	288		5.0	5.0	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: OB-20B-082318
Date Collected: 08/23/18 10:45
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-1
Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.59		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 02:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/27/18 08:04*	*08/28/18 02:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U *	0.050	0.016	ug/L		08/26/18 16:46	08/27/18 16:45	1
Benzo[a]pyrene	0.022	U *	0.050	0.022	ug/L		08/26/18 16:46	08/27/18 16:45	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 16:46	08/27/18 16:45	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		08/26/18 16:46	08/27/18 16:45	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 16:46	08/27/18 16:45	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 16:46	08/27/18 16:45	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 16:46	08/27/18 16:45	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 16:46	08/27/18 16:45	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 16:46	08/27/18 16:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 16:46	08/27/18 05:33	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 16:46	08/27/18 05:33	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/26/18 16:46	08/27/18 05:33	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 05:33	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 05:33	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 05:33	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 16:46	08/27/18 05:33	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 05:33	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 16:46	08/27/18 05:33	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 16:46	08/27/18 05:33	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 16:46	08/27/18 05:33	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 16:46	08/27/18 05:33	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 16:46	08/27/18 05:33	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 16:46	08/27/18 05:33	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 16:46	08/27/18 05:33	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 16:46	08/27/18 05:33	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 16:46	08/27/18 05:33	1
Naphthalene	1.1	J	10	1.1	ug/L		08/26/18 16:46	08/27/18 05:33	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 16:46	08/27/18 05:33	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/26/18 16:46	08/27/18 05:33	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 05:33	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 16:46	08/27/18 05:33	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 05:33	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 16:46	08/27/18 05:33	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 16:46	08/27/18 05:33	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 16:46	08/27/18 05:33	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 16:46	08/27/18 05:33	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 16:46	08/27/18 05:33	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 05:33	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 05:33	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 16:46	08/27/18 05:33	1

Client Sample ID: OB-20B-082318
Date Collected: 08/23/18 10:45
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 16:46	08/27/18 05:33	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 16:46	08/27/18 05:33	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 16:46	08/27/18 05:33	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 16:46	08/27/18 05:33	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 16:46	08/27/18 05:33	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 05:33	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 05:33	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 05:33	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 05:33	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 05:33	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 05:33	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 16:46	08/27/18 05:33	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 16:46	08/27/18 05:33	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 16:46	08/27/18 05:33	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 16:46	08/27/18 05:33	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 16:46	08/27/18 05:33	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 16:46	08/27/18 05:33	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 05:33	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 05:33	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 16:46	08/27/18 05:33	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 16:46	08/27/18 05:33	1
Caprolactam	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 05:33	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 16:46	08/27/18 05:33	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 05:33	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 05:33	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 05:33	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 05:33	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 05:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 16:46*	*08/27/18 05:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*100*		*30 - 130*	*08/26/18 16:46*	*08/27/18 05:33*	*1*
Phenol-d5 (Surr)	*34*		*15 - 110*	*08/26/18 16:46*	*08/27/18 05:33*	*1*
Terphenyl-d14 (Surr)	*86*		*30 - 130*	*08/26/18 16:46*	*08/27/18 05:33*	*1*
2,4,6-Tribromophenol (Surr)	*112*	*X*	*15 - 110*	*08/26/18 16:46*	*08/27/18 05:33*	*1*
2-Fluorophenol (Surr)	*53*		*15 - 110*	*08/26/18 16:46*	*08/27/18 05:33*	*1*
2-Fluorobiphenyl	*85*		*30 - 130*	*08/26/18 16:46*	*08/27/18 05:33*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 04:20	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 04:20	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 04:20	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 04:20	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 04:20	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 04:20	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 04:20	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 04:20	1

Client Sample ID: OB-20B-082318
Date Collected: 08/23/18 10:45
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-1
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1262	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 04:20	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 04:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*30 - 150*	*08/27/18 09:27*	*08/29/18 04:20*	*1*
Tetrachloro-m-xylene	*61*		*30 - 150*	*08/27/18 09:27*	*08/29/18 04:20*	*1*
DCB Decachlorobiphenyl	*84*		*30 - 150*	*08/27/18 09:27*	*08/29/18 04:20*	*1*
DCB Decachlorobiphenyl	*67*		*30 - 150*	*08/27/18 09:27*	*08/29/18 04:20*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.19**		0.12	0.078	mg/L			08/26/18 17:05	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/26/18 17:05	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 00:50	08/30/18 21:45	2
Arsenic	**1.1**	**J**	2.0	0.77	ug/L		08/30/18 00:50	08/30/18 21:45	2
Barium	**62.2**		4.0	1.1	ug/L		08/30/18 00:50	08/30/18 21:45	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 00:50	08/30/18 21:45	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 00:50	08/30/18 21:45	2
Cobalt	**21.5**		4.0	1.3	ug/L		08/30/18 00:50	08/30/18 21:45	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 21:45	2
Copper	**4.2**		4.0	1.9	ug/L		08/30/18 00:50	08/30/18 21:45	2
Manganese	**5820**		8.0	2.7	ug/L		08/30/18 00:50	08/30/18 21:45	2
Nickel	**4.2**		4.0	1.3	ug/L		08/30/18 00:50	08/30/18 21:45	2
Lead	**0.43**	**J B**	1.2	0.37	ug/L		08/30/18 00:50	08/30/18 21:45	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 00:50	08/30/18 21:45	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 00:50	08/30/18 21:45	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 00:50	08/30/18 21:45	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 00:50	08/30/18 21:45	2
Aluminum	**26.1**	**J**	40.0	15.0	ug/L		08/30/18 00:50	08/30/18 21:45	2
Sodium	**4320**		200	75.7	ug/L		08/30/18 00:50	08/30/18 21:45	2
Magnesium	**8210**		200	65.7	ug/L		08/30/18 00:50	08/30/18 21:45	2
Potassium	**2430**		200	64.9	ug/L		08/30/18 00:50	08/30/18 21:45	2
Calcium	**40400**		200	67.6	ug/L		08/30/18 00:50	08/30/18 21:45	2
Iron	**31500**		120	45.7	ug/L		08/30/18 00:50	08/30/18 21:45	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 00:50	08/30/18 21:45	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 03:29	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 03:29	2
Barium	**36.5**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 03:29	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 03:29	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 03:29	2
Cobalt	**18.4**		4.0	1.3	ug/L		08/30/18 01:59	08/30/18 13:37	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 03:29	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 13:37	2
Manganese	**5660**		8.0	2.7	ug/L		08/30/18 01:59	08/30/18 03:29	2

Client Sample ID: OB-20B-082318

Lab Sample ID: 460-163302-1

Date Collected: 08/23/18 10:45

Matrix: Water

Date Received: 08/24/18 17:10

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**3.4**	**J**	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 13:37	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 03:29	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 03:29	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 03:29	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 03:29	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 01:59	08/30/18 03:29	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 03:29	2
Sodium	**3320**		200	75.7	ug/L		08/30/18 01:59	08/30/18 03:29	2
Magnesium	**6760**		200	65.7	ug/L		08/30/18 01:59	08/30/18 03:29	2
Potassium	**2230**		200	64.9	ug/L		08/30/18 01:59	08/30/18 03:29	2
Calcium	**37600**		200	67.6	ug/L		08/30/18 01:59	08/30/18 03:29	2
Iron	**3840**		120	45.7	ug/L		08/30/18 01:59	08/30/18 03:29	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 03:29	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 14:36	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 10:49	1
Bicarbonate Alkalinity as CaCO3	**196**		5.0	5.0	mg/L			08/26/18 10:24	1
Alkalinity	**196**		5.0	5.0	mg/L			08/26/18 10:24	1

Client Sample ID: OB-20A-082318

Lab Sample ID: 460-163302-2

Date Collected: 08/23/18 12:35

Matrix: Water

Date Received: 08/24/18 17:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/30/18 13:15	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/30/18 13:15	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/30/18 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*70 - 130*		*08/30/18 13:15*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 14:25	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 14:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 14:25	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 14:25	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 14:25	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 14:25	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 14:25	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 14:25	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-20A-082318
Date Collected: 08/23/18 12:35
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 14:25	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 14:25	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 14:25	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/29/18 14:25	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/29/18 14:25	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 14:25	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 14:25	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 14:25	1
Acetone	5.0	U	5.0	5.0	ug/L			08/29/18 14:25	1
Benzene	0.43	U	1.0	0.43	ug/L			08/29/18 14:25	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 14:25	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 14:25	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/29/18 14:25	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 14:25	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/29/18 14:25	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 14:25	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 14:25	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/29/18 14:25	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 14:25	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 14:25	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 14:25	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 14:25	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/29/18 14:25	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 14:25	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 14:25	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 14:25	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/29/18 14:25	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 14:25	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 14:25	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/29/18 14:25	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/29/18 14:25	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 14:25	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 14:25	1
Toluene	0.38	U	1.0	0.38	ug/L			08/29/18 14:25	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 14:25	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 14:25	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 14:25	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 14:25	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 14:25	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 14:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/18 14:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*70 - 130*		*08/29/18 14:25*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*08/29/18 14:25*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/29/18 14:25*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/29/18 14:25*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-20A-082318
Date Collected: 08/23/18 12:35
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-2
Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.28		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 03:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*10 - 150*	*08/27/18 08:04*	*08/28/18 03:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U *	0.050	0.016	ug/L		08/26/18 16:46	08/27/18 17:06	1
Benzo[a]pyrene	0.022	U *	0.050	0.022	ug/L		08/26/18 16:46	08/27/18 17:06	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 16:46	08/27/18 17:06	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		08/26/18 16:46	08/27/18 17:06	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 16:46	08/27/18 17:06	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 16:46	08/27/18 17:06	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 16:46	08/27/18 17:06	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 16:46	08/27/18 17:06	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 16:46	08/27/18 17:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 16:46	08/27/18 05:54	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 16:46	08/27/18 05:54	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/26/18 16:46	08/27/18 05:54	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 05:54	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 05:54	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 05:54	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 16:46	08/27/18 05:54	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 05:54	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 16:46	08/27/18 05:54	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 16:46	08/27/18 05:54	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 16:46	08/27/18 05:54	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 16:46	08/27/18 05:54	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 16:46	08/27/18 05:54	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 16:46	08/27/18 05:54	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 16:46	08/27/18 05:54	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 16:46	08/27/18 05:54	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 16:46	08/27/18 05:54	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 05:54	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 16:46	08/27/18 05:54	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/26/18 16:46	08/27/18 05:54	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 05:54	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 16:46	08/27/18 05:54	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 05:54	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 16:46	08/27/18 05:54	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 16:46	08/27/18 05:54	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 16:46	08/27/18 05:54	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 16:46	08/27/18 05:54	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 16:46	08/27/18 05:54	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 05:54	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 05:54	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 16:46	08/27/18 05:54	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 16:46	08/27/18 05:54	1

Client Sample ID: OB-20A-082318
Date Collected: 08/23/18 12:35
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 16:46	08/27/18 05:54	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 16:46	08/27/18 05:54	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 16:46	08/27/18 05:54	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 16:46	08/27/18 05:54	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 05:54	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 05:54	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 05:54	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 05:54	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 05:54	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 05:54	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 16:46	08/27/18 05:54	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 16:46	08/27/18 05:54	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 16:46	08/27/18 05:54	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 16:46	08/27/18 05:54	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 16:46	08/27/18 05:54	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 16:46	08/27/18 05:54	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 05:54	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 05:54	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 16:46	08/27/18 05:54	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 16:46	08/27/18 05:54	1
Caprolactam	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 05:54	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 16:46	08/27/18 05:54	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 05:54	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 05:54	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 05:54	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 05:54	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 05:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 16:46*	*08/27/18 05:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*97*		*30 - 130*	*08/26/18 16:46*	*08/27/18 05:54*	*1*
Phenol-d5 (Surr)	*35*		*15 - 110*	*08/26/18 16:46*	*08/27/18 05:54*	*1*
Terphenyl-d14 (Surr)	*88*		*30 - 130*	*08/26/18 16:46*	*08/27/18 05:54*	*1*
2,4,6-Tribromophenol (Surr)	*104*		*15 - 110*	*08/26/18 16:46*	*08/27/18 05:54*	*1*
2-Fluorophenol (Surr)	*52*		*15 - 110*	*08/26/18 16:46*	*08/27/18 05:54*	*1*
2-Fluorobiphenyl	*80*		*30 - 130*	*08/26/18 16:46*	*08/27/18 05:54*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 04:35	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 04:35	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 04:35	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 04:35	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 04:35	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 04:35	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 04:35	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 04:35	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 04:35	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-20A-082318
Date Collected: 08/23/18 12:35
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-2
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 04:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 150*	*08/27/18 09:27*	*08/29/18 04:35*	*1*
Tetrachloro-m-xylene	*77*		*30 - 150*	*08/27/18 09:27*	*08/29/18 04:35*	*1*
DCB Decachlorobiphenyl	*53*		*30 - 150*	*08/27/18 09:27*	*08/29/18 04:35*	*1*
DCB Decachlorobiphenyl	*50*		*30 - 150*	*08/27/18 09:27*	*08/29/18 04:35*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.45**		0.12	0.078	mg/L			08/26/18 17:16	1
Sulfate	**1.65**		0.60	0.33	mg/L			08/26/18 17:16	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 00:50	08/30/18 21:47	2
Arsenic	**0.77**	**J**	2.0	0.77	ug/L		08/30/18 00:50	08/30/18 21:47	2
Barium	**132**		4.0	1.1	ug/L		08/30/18 00:50	08/30/18 21:47	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 00:50	08/30/18 21:47	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 00:50	08/30/18 21:47	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 21:47	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 21:47	2
Copper	**3.1**	**J**	4.0	1.9	ug/L		08/30/18 00:50	08/30/18 21:47	2
Manganese	**352**		8.0	2.7	ug/L		08/30/18 00:50	08/30/18 21:47	2
Nickel	**1.9**	**J**	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 21:47	2
Lead	**0.41**	**J B**	1.2	0.37	ug/L		08/30/18 00:50	08/30/18 21:47	2
Antimony	**0.75**	**J**	2.0	0.62	ug/L		08/30/18 00:50	08/30/18 21:47	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 00:50	08/30/18 21:47	2
Vanadium	**1.4**	**J**	4.0	1.2	ug/L		08/30/18 00:50	08/30/18 21:47	2
Zinc	**11.6**	**J**	16.0	5.4	ug/L		08/30/18 00:50	08/30/18 21:47	2
Aluminum	**46.0**		40.0	15.0	ug/L		08/30/18 00:50	08/30/18 21:47	2
Sodium	**3750**		200	75.7	ug/L		08/30/18 00:50	08/30/18 21:47	2
Magnesium	**2490**		200	65.7	ug/L		08/30/18 00:50	08/30/18 21:47	2
Potassium	**2090**		200	64.9	ug/L		08/30/18 00:50	08/30/18 21:47	2
Calcium	**19400**		200	67.6	ug/L		08/30/18 00:50	08/30/18 21:47	2
Iron	**19900**		120	45.7	ug/L		08/30/18 00:50	08/30/18 21:47	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 00:50	08/30/18 21:47	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 03:32	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 03:32	2
Barium	**97.1**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 03:32	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 03:32	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 03:32	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 13:40	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 03:32	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 13:40	2
Manganese	**311**		8.0	2.7	ug/L		08/30/18 01:59	08/30/18 03:32	2
Nickel	**1.3**	**J**	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 13:40	2

Client Sample ID: OB-20A-082318

Lab Sample ID: 460-163302-2
Date Collected: 08/23/18 12:35
Matrix: Water
Date Received: 08/24/18 17:10

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 03:32	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 03:32	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 03:32	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 03:32	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 01:59	08/30/18 03:32	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 03:32	2
Sodium	**2800**		200	75.7	ug/L		08/30/18 01:59	08/30/18 03:32	2
Magnesium	**1980**		200	65.7	ug/L		08/30/18 01:59	08/30/18 03:32	2
Potassium	**1860**		200	64.9	ug/L		08/30/18 01:59	08/30/18 03:32	2
Calcium	**17600**		200	67.6	ug/L		08/30/18 01:59	08/30/18 03:32	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 01:59	08/30/18 03:32	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 03:32	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 14:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 10:50	1
Bicarbonate Alkalinity as CaCO3	**96.1**		5.0	5.0	mg/L			08/26/18 10:30	1
Alkalinity	**96.1**		5.0	5.0	mg/L			08/26/18 10:30	1

Client Sample ID: RW-6-082318

Lab Sample ID: 460-163302-3
Date Collected: 08/23/18 14:25
Matrix: Water
Date Received: 08/24/18 17:10

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 03:25	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/27/18 08:04*	*08/28/18 03:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U *	0.050	0.016	ug/L		08/26/18 16:46	08/27/18 17:28	1
Benzo[a]pyrene	0.022	U *	0.050	0.022	ug/L		08/26/18 16:46	08/27/18 17:28	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 16:46	08/27/18 17:28	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		08/26/18 16:46	08/27/18 17:28	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 16:46	08/27/18 17:28	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 16:46	08/27/18 17:28	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 16:46	08/27/18 17:28	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 16:46	08/27/18 17:28	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 16:46	08/27/18 17:28	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: RW-6-082318
Date Collected: 08/23/18 14:25
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 16:46	08/27/18 06:15	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 16:46	08/27/18 06:15	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/26/18 16:46	08/27/18 06:15	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 06:15	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 06:15	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 06:15	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 16:46	08/27/18 06:15	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 06:15	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 16:46	08/27/18 06:15	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 16:46	08/27/18 06:15	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 16:46	08/27/18 06:15	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 16:46	08/27/18 06:15	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 16:46	08/27/18 06:15	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 16:46	08/27/18 06:15	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 16:46	08/27/18 06:15	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 16:46	08/27/18 06:15	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 16:46	08/27/18 06:15	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 06:15	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 16:46	08/27/18 06:15	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/26/18 16:46	08/27/18 06:15	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 06:15	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 16:46	08/27/18 06:15	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 06:15	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 16:46	08/27/18 06:15	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 16:46	08/27/18 06:15	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 16:46	08/27/18 06:15	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 16:46	08/27/18 06:15	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 16:46	08/27/18 06:15	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 06:15	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 06:15	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 16:46	08/27/18 06:15	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 16:46	08/27/18 06:15	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 16:46	08/27/18 06:15	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 16:46	08/27/18 06:15	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 16:46	08/27/18 06:15	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 16:46	08/27/18 06:15	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 06:15	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 06:15	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 06:15	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 06:15	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 06:15	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 06:15	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 16:46	08/27/18 06:15	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 16:46	08/27/18 06:15	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 16:46	08/27/18 06:15	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 16:46	08/27/18 06:15	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 16:46	08/27/18 06:15	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 16:46	08/27/18 06:15	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 06:15	1

Client Sample ID: RW-6-082318
Date Collected: 08/23/18 14:25
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 06:15	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 16:46	08/27/18 06:15	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 16:46	08/27/18 06:15	1
Caprolactam	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 06:15	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 16:46	08/27/18 06:15	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 06:15	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 06:15	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 06:15	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 06:15	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 06:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 16:46*	*08/27/18 06:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*94*		*30 - 130*	*08/26/18 16:46*	*08/27/18 06:15*	*1*
Phenol-d5 (Surr)	*31*		*15 - 110*	*08/26/18 16:46*	*08/27/18 06:15*	*1*
Terphenyl-d14 (Surr)	*82*		*30 - 130*	*08/26/18 16:46*	*08/27/18 06:15*	*1*
2,4,6-Tribromophenol (Surr)	*103*		*15 - 110*	*08/26/18 16:46*	*08/27/18 06:15*	*1*
2-Fluorophenol (Surr)	*47*		*15 - 110*	*08/26/18 16:46*	*08/27/18 06:15*	*1*
2-Fluorobiphenyl	*82*		*30 - 130*	*08/26/18 16:46*	*08/27/18 06:15*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 11:03	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 11:03	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 11:03	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 11:03	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 11:03	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 11:03	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 11:03	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 11:03	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 11:03	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 11:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*30 - 150*	*08/27/18 09:27*	*08/29/18 11:03*	*1*
Tetrachloro-m-xylene	*70*		*30 - 150*	*08/27/18 09:27*	*08/29/18 11:03*	*1*
DCB Decachlorobiphenyl	*56*		*30 - 150*	*08/27/18 09:27*	*08/29/18 11:03*	*1*
DCB Decachlorobiphenyl	*59*		*30 - 150*	*08/27/18 09:27*	*08/29/18 11:03*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**1.21**		0.60	0.33	mg/L			08/26/18 17:27	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.50**	**D**	0.60	0.39	mg/L			08/27/18 21:21	5

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: RW-6-082318
Date Collected: 08/23/18 14:25
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-3
Matrix: Water

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 00:50	08/30/18 21:50	2
Arsenic	**1.1**	**J**	2.0	0.77	ug/L		08/30/18 00:50	08/30/18 21:50	2
Barium	**350**		4.0	1.1	ug/L		08/30/18 00:50	08/30/18 21:50	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 00:50	08/30/18 21:50	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 00:50	08/30/18 21:50	2
Cobalt	**2.9**	**J**	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 21:50	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 21:50	2
Copper	**4.1**		4.0	1.9	ug/L		08/30/18 00:50	08/30/18 21:50	2
Manganese	**5370**		8.0	2.7	ug/L		08/30/18 00:50	08/30/18 21:50	2
Nickel	**1.3**	**J**	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 21:50	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 00:50	08/30/18 21:50	2
Antimony	**0.69**	**J**	2.0	0.62	ug/L		08/30/18 00:50	08/30/18 21:50	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 00:50	08/30/18 21:50	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 00:50	08/30/18 21:50	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 00:50	08/30/18 21:50	2
Aluminum	**18.1**	**J**	40.0	15.0	ug/L		08/30/18 00:50	08/30/18 21:50	2
Sodium	**9310**		200	75.7	ug/L		08/30/18 00:50	08/30/18 21:50	2
Magnesium	**12200**		200	65.7	ug/L		08/30/18 00:50	08/30/18 21:50	2
Potassium	**3000**		200	64.9	ug/L		08/30/18 00:50	08/30/18 21:50	2
Calcium	**69200**		200	67.6	ug/L		08/30/18 00:50	08/30/18 21:50	2
Iron	**41200**		120	45.7	ug/L		08/30/18 00:50	08/30/18 21:50	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 00:50	08/30/18 21:50	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 03:39	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 03:39	2
Barium	**228**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 03:39	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 03:39	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 03:39	2
Cobalt	**2.2**	**J**	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 13:54	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 03:39	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 15:52	2
Manganese	**5370**		8.0	2.7	ug/L		08/30/18 01:59	08/30/18 03:39	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 13:54	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 03:39	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 03:39	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 03:39	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 03:39	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 01:59	08/30/18 03:39	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 03:39	2
Sodium	**7970**		200	75.7	ug/L		08/30/18 01:59	08/30/18 03:39	2
Magnesium	**10400**		200	65.7	ug/L		08/30/18 01:59	08/30/18 03:39	2
Potassium	**2840**		200	64.9	ug/L		08/30/18 01:59	08/30/18 03:39	2
Calcium	**66900**		200	67.6	ug/L		08/30/18 01:59	08/30/18 03:39	2
Iron	**4790**		120	45.7	ug/L		08/30/18 01:59	08/30/18 03:39	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 03:39	2

Client Sample ID: RW-6-082318

Lab Sample ID: 460-163302-3

Date Collected: 08/23/18 14:25

Matrix: Water

Date Received: 08/24/18 17:10

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:41	08/29/18 15:50	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 10:51	1
Bicarbonate Alkalinity as CaCO3	**301**		5.0	5.0	mg/L			08/26/18 10:39	1
Alkalinity	**301**		5.0	5.0	mg/L			08/26/18 10:39	1

Client Sample ID: RW-6A-082318

Lab Sample ID: 460-163302-4

Date Collected: 08/23/18 15:45

Matrix: Water

Date Received: 08/24/18 17:10

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.1**		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 03:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*33*		*10 - 150*	*08/27/18 08:04*	*08/28/18 03:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U *	0.050	0.016	ug/L		08/26/18 16:46	08/27/18 17:49	1
Benzo[a]pyrene	0.022	U *	0.050	0.022	ug/L		08/26/18 16:46	08/27/18 17:49	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 16:46	08/27/18 17:49	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		08/26/18 16:46	08/27/18 17:49	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 16:46	08/27/18 17:49	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 16:46	08/27/18 17:49	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 16:46	08/27/18 17:49	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 16:46	08/27/18 17:49	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 16:46	08/27/18 17:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 16:46	08/27/18 06:36	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 16:46	08/27/18 06:36	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/26/18 16:46	08/27/18 06:36	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 06:36	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 06:36	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 06:36	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 16:46	08/27/18 06:36	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 06:36	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 16:46	08/27/18 06:36	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 16:46	08/27/18 06:36	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 16:46	08/27/18 06:36	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 16:46	08/27/18 06:36	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 16:46	08/27/18 06:36	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 16:46	08/27/18 06:36	1

Client Sample ID: RW-6A-082318
Date Collected: 08/23/18 15:45
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 16:46	08/27/18 06:36	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 16:46	08/27/18 06:36	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 16:46	08/27/18 06:36	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 06:36	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 16:46	08/27/18 06:36	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/26/18 16:46	08/27/18 06:36	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 06:36	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 16:46	08/27/18 06:36	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 06:36	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 16:46	08/27/18 06:36	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 16:46	08/27/18 06:36	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 16:46	08/27/18 06:36	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 16:46	08/27/18 06:36	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 16:46	08/27/18 06:36	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 06:36	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 06:36	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 16:46	08/27/18 06:36	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 16:46	08/27/18 06:36	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 16:46	08/27/18 06:36	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 16:46	08/27/18 06:36	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 16:46	08/27/18 06:36	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 16:46	08/27/18 06:36	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 06:36	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 06:36	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 06:36	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 06:36	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 06:36	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 06:36	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 16:46	08/27/18 06:36	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 16:46	08/27/18 06:36	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 16:46	08/27/18 06:36	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 16:46	08/27/18 06:36	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 16:46	08/27/18 06:36	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 16:46	08/27/18 06:36	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 06:36	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 06:36	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 16:46	08/27/18 06:36	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 16:46	08/27/18 06:36	1
Caprolactam	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 06:36	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 16:46	08/27/18 06:36	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 06:36	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 06:36	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 06:36	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 06:36	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 06:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzenesulfonamide, N-cyclohexyl-4-methyl-	*6.9*	*J N*	*ug/L*		*10.34*	*80-30-8*	*08/26/18 16:46*	*08/27/18 06:36*	*1*

Client Sample ID: RW-6A-082318

Date Collected: 08/23/18 15:45
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-4

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*96*		*30 - 130*	*08/26/18 16:46*	*08/27/18 06:36*	*1*
Phenol-d5 (Surr)	*31*		*15 - 110*	*08/26/18 16:46*	*08/27/18 06:36*	*1*
Terphenyl-d14 (Surr)	*84*		*30 - 130*	*08/26/18 16:46*	*08/27/18 06:36*	*1*
2,4,6-Tribromophenol (Surr)	*102*		*15 - 110*	*08/26/18 16:46*	*08/27/18 06:36*	*1*
2-Fluorophenol (Surr)	*48*		*15 - 110*	*08/26/18 16:46*	*08/27/18 06:36*	*1*
2-Fluorobiphenyl	*80*		*30 - 130*	*08/26/18 16:46*	*08/27/18 06:36*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 11:27	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 11:27	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 11:27	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 11:27	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 11:27	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 11:27	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 11:27	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 11:27	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 11:27	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 11:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*71*		*30 - 150*	*08/27/18 09:27*	*08/29/18 11:27*	*1*
Tetrachloro-m-xylene	*69*		*30 - 150*	*08/27/18 09:27*	*08/29/18 11:27*	*1*
DCB Decachlorobiphenyl	*71*		*30 - 150*	*08/27/18 09:27*	*08/29/18 11:27*	*1*
DCB Decachlorobiphenyl	*73*		*30 - 150*	*08/27/18 09:27*	*08/29/18 11:27*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.50**		0.12	0.078	mg/L			08/26/18 17:39	1
Sulfate	**0.64**		0.60	0.33	mg/L			08/26/18 17:39	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 00:50	08/30/18 22:01	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 00:50	08/30/18 22:01	2
Barium	**35.2**		4.0	1.1	ug/L		08/30/18 00:50	08/30/18 22:01	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 00:50	08/30/18 22:01	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 00:50	08/30/18 22:01	2
Cobalt	**9.8**		4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:01	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:01	2
Copper	**5.2**		4.0	1.9	ug/L		08/30/18 00:50	08/30/18 22:01	2
Manganese	**9800**		8.0	2.7	ug/L		08/30/18 00:50	08/30/18 22:01	2
Nickel	**2.2**	**J**	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:01	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 00:50	08/30/18 22:01	2
Antimony	**0.94**	**J**	2.0	0.62	ug/L		08/30/18 00:50	08/30/18 22:01	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 00:50	08/30/18 22:01	2
Vanadium	**2.1**	**J**	4.0	1.2	ug/L		08/30/18 00:50	08/30/18 22:01	2
Zinc	**7.2**	**J**	16.0	5.4	ug/L		08/30/18 00:50	08/30/18 22:01	2
Aluminum	**48.0**		40.0	15.0	ug/L		08/30/18 00:50	08/30/18 22:01	2
Sodium	**10500**		200	75.7	ug/L		08/30/18 00:50	08/30/18 22:01	2
Magnesium	**18800**		200	65.7	ug/L		08/30/18 00:50	08/30/18 22:01	2

Client Sample ID: RW-6A-082318

Lab Sample ID: 460-163302-4

Date Collected: 08/23/18 15:45

Matrix: Water

Date Received: 08/24/18 17:10

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**2440**		200	64.9	ug/L		08/30/18 00:50	08/30/18 22:01	2
Calcium	**72400**		200	67.6	ug/L		08/30/18 00:50	08/30/18 22:01	2
Iron	**13200**		120	45.7	ug/L		08/30/18 00:50	08/30/18 22:01	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 00:50	08/30/18 22:01	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 03:53	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 03:53	2
Barium	**24.2**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 03:53	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 03:53	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 03:53	2
Cobalt	**7.3**		4.0	1.3	ug/L		08/30/18 01:59	08/30/18 13:57	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 03:53	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 15:59	2
Manganese	**11300**		40.0	13.5	ug/L		08/30/18 01:59	08/30/18 16:06	10
Nickel	**1.6**	**J**	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 13:57	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 03:53	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 03:53	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 03:53	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 03:53	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 01:59	08/30/18 03:53	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 03:53	2
Sodium	**7170**		200	75.7	ug/L		08/30/18 01:59	08/30/18 03:53	2
Magnesium	**17100**		200	65.7	ug/L		08/30/18 01:59	08/30/18 03:53	2
Potassium	**2340**		200	64.9	ug/L		08/30/18 01:59	08/30/18 03:53	2
Calcium	**73300**		200	67.6	ug/L		08/30/18 01:59	08/30/18 03:53	2
Iron	**1060**		120	45.7	ug/L		08/30/18 01:59	08/30/18 03:53	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 03:53	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:41	08/29/18 15:51	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 17:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 10:52	1
Bicarbonate Alkalinity as CaCO3	**306**		5.0	5.0	mg/L			08/26/18 10:47	1
Alkalinity	**306**		5.0	5.0	mg/L			08/26/18 10:47	1

Client Sample ID: CMS-50-082318

Lab Sample ID: 460-163302-5

Date Collected: 08/23/18 09:15

Matrix: Water

Date Received: 08/24/18 17:10

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.34**		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 01:56	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	30		10 - 150	08/27/18 08:04	08/28/18 01:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U *	0.050	0.016	ug/L		08/26/18 16:46	08/27/18 16:03	1
Benzo[a]pyrene	0.022	U *	0.050	0.022	ug/L		08/26/18 16:46	08/27/18 16:03	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 16:46	08/27/18 16:03	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		08/26/18 16:46	08/27/18 16:03	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 16:46	08/27/18 16:03	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 16:46	08/27/18 16:03	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 16:46	08/27/18 16:03	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 16:46	08/27/18 16:03	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 16:46	08/27/18 16:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 16:46	08/27/18 04:09	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 16:46	08/27/18 04:09	1
2-Methylphenol	0.26	U F1	10	0.26	ug/L		08/26/18 16:46	08/27/18 04:09	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 04:09	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 04:09	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 04:09	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 16:46	08/27/18 04:09	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 04:09	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 16:46	08/27/18 04:09	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 16:46	08/27/18 04:09	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 16:46	08/27/18 04:09	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 16:46	08/27/18 04:09	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 16:46	08/27/18 04:09	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 16:46	08/27/18 04:09	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 16:46	08/27/18 04:09	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 16:46	08/27/18 04:09	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 16:46	08/27/18 04:09	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 04:09	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 16:46	08/27/18 04:09	1
Hexachlorobutadiene	0.78	U * F1	1.0	0.78	ug/L		08/26/18 16:46	08/27/18 04:09	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 04:09	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 16:46	08/27/18 04:09	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 04:09	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 16:46	08/27/18 04:09	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 16:46	08/27/18 04:09	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 16:46	08/27/18 04:09	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 16:46	08/27/18 04:09	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 16:46	08/27/18 04:09	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 04:09	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 04:09	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 16:46	08/27/18 04:09	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 16:46	08/27/18 04:09	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 16:46	08/27/18 04:09	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 16:46	08/27/18 04:09	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 16:46	08/27/18 04:09	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 16:46	08/27/18 04:09	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 04:09	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 04:09	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 04:09	1

Client Sample ID: CMS-50-082318
Date Collected: 08/23/18 09:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 04:09	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 04:09	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 04:09	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 16:46	08/27/18 04:09	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 16:46	08/27/18 04:09	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 16:46	08/27/18 04:09	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 16:46	08/27/18 04:09	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 16:46	08/27/18 04:09	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 16:46	08/27/18 04:09	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 04:09	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 04:09	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 16:46	08/27/18 04:09	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 16:46	08/27/18 04:09	1
Caprolactam	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 04:09	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 16:46	08/27/18 04:09	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 04:09	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 04:09	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 04:09	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 04:09	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 04:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 16:46*	*08/27/18 04:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*103*		*30 - 130*	*08/26/18 16:46*	*08/27/18 04:09*	*1*
Phenol-d5 (Surr)	*35*		*15 - 110*	*08/26/18 16:46*	*08/27/18 04:09*	*1*
Terphenyl-d14 (Surr)	*103*		*30 - 130*	*08/26/18 16:46*	*08/27/18 04:09*	*1*
2,4,6-Tribromophenol (Surr)	*111*	*X*	*15 - 110*	*08/26/18 16:46*	*08/27/18 04:09*	*1*
2-Fluorophenol (Surr)	*53*		*15 - 110*	*08/26/18 16:46*	*08/27/18 04:09*	*1*
2-Fluorobiphenyl	*92*		*30 - 130*	*08/26/18 16:46*	*08/27/18 04:09*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 00:04	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 00:04	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 00:04	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 00:04	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 00:04	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 00:04	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 00:04	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 00:04	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 00:04	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*30 - 150*	*08/27/18 09:27*	*08/29/18 00:04*	*1*
Tetrachloro-m-xylene	*84*		*30 - 150*	*08/27/18 09:27*	*08/29/18 00:04*	*1*
DCB Decachlorobiphenyl	*91*		*30 - 150*	*08/27/18 09:27*	*08/29/18 00:04*	*1*
DCB Decachlorobiphenyl	*84*		*30 - 150*	*08/27/18 09:27*	*08/29/18 00:04*	*1*

Client Sample ID: CMS-50-082318
Date Collected: 08/23/18 09:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-5
Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**6.63**		0.60	0.33	mg/L			08/26/18 17:50	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**184**	**D**	6.00	3.90	mg/L			08/27/18 21:34	50

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 00:10	08/31/18 00:25	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 00:10	08/31/18 00:25	2
Barium	**66.3**		4.0	1.1	ug/L		08/30/18 00:10	08/31/18 00:25	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 00:10	08/31/18 00:25	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 00:10	08/31/18 00:25	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 00:10	08/31/18 00:25	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 00:10	08/31/18 00:25	2
Copper	**3.1**	**J**	4.0	1.9	ug/L		08/30/18 00:10	08/31/18 00:25	2
Manganese	**776**		8.0	2.7	ug/L		08/30/18 00:10	08/31/18 00:25	2
Nickel	**1.4**	**J**	4.0	1.3	ug/L		08/30/18 00:10	08/31/18 00:25	2
Lead	**0.42**	**J**	1.2	0.37	ug/L		08/30/18 00:10	08/31/18 00:25	2
Antimony	**1.5**	**J**	2.0	0.62	ug/L		08/30/18 00:10	08/31/18 00:25	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 00:10	08/31/18 00:25	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 00:10	08/31/18 00:25	2
Zinc	**326**		16.0	5.4	ug/L		08/30/18 00:10	08/31/18 00:25	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 00:10	08/31/18 00:25	2
Sodium	**92400**		200	75.7	ug/L		08/30/18 00:10	08/31/18 00:25	2
Magnesium	**14700**		200	65.7	ug/L		08/30/18 00:10	08/31/18 00:25	2
Potassium	**2280**		200	64.9	ug/L		08/30/18 00:10	08/31/18 00:25	2
Calcium	**51000**		200	67.6	ug/L		08/30/18 00:10	08/31/18 00:25	2
Iron	**14500**		120	45.7	ug/L		08/30/18 00:10	08/31/18 00:25	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 00:10	08/31/18 00:25	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 03:22	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 03:22	2
Barium	**47.5**	**F1**	4.0	1.1	ug/L		08/30/18 01:59	08/30/18 03:22	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 03:22	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 03:22	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 13:27	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 03:22	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 13:27	2
Manganese	**671**		8.0	2.7	ug/L		08/30/18 01:59	08/30/18 03:22	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 13:27	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 03:22	2
Antimony	0.62	U F1	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 03:22	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 03:22	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 03:22	2
Zinc	**81.2**		16.0	5.4	ug/L		08/30/18 01:59	08/30/18 03:22	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 03:22	2
Sodium	**77800**		200	75.7	ug/L		08/30/18 01:59	08/30/18 03:22	2

Client Sample ID: CMS-50-082318

Lab Sample ID: 460-163302-5

Date Collected: 08/23/18 09:15

Matrix: Water

Date Received: 08/24/18 17:10

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**13300**		200	65.7	ug/L		08/30/18 01:59	08/30/18 03:22	2
Potassium	**2060**		200	64.9	ug/L		08/30/18 01:59	08/30/18 03:22	2
Calcium	**45200**		200	67.6	ug/L		08/30/18 01:59	08/30/18 03:22	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 01:59	08/30/18 03:22	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 03:22	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:41	08/29/18 15:41	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/30/18 12:57	08/30/18 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U * F1	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 10:46	1
Bicarbonate Alkalinity as CaCO3	**146**		5.0	5.0	mg/L			08/26/18 11:34	1
Alkalinity	**146**		5.0	5.0	mg/L			08/26/18 11:34	1

Client Sample ID: OB-30C-082318

Lab Sample ID: 460-163302-6

Date Collected: 08/23/18 14:55

Matrix: Water

Date Received: 08/24/18 17:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/30/18 14:25	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/30/18 14:25	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/30/18 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*70 - 130*		*08/30/18 14:25*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/28/18 23:56	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/28/18 23:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/28/18 23:56	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/28/18 23:56	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/28/18 23:56	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/28/18 23:56	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/28/18 23:56	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/28/18 23:56	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/28/18 23:56	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/28/18 23:56	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/28/18 23:56	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/28/18 23:56	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/28/18 23:56	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/28/18 23:56	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/28/18 23:56	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/28/18 23:56	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-30C-082318
Date Collected: 08/23/18 14:55
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	5.0	5.0	ug/L			08/28/18 23:56	1
Benzene	0.43	U	1.0	0.43	ug/L			08/28/18 23:56	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/28/18 23:56	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/28/18 23:56	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/28/18 23:56	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/28/18 23:56	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/28/18 23:56	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/28/18 23:56	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/28/18 23:56	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/28/18 23:56	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/28/18 23:56	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/28/18 23:56	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/28/18 23:56	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/28/18 23:56	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/28/18 23:56	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/28/18 23:56	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/28/18 23:56	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/28/18 23:56	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/28/18 23:56	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/28/18 23:56	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/28/18 23:56	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/28/18 23:56	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/28/18 23:56	1
Styrene	0.42	U	1.0	0.42	ug/L			08/28/18 23:56	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/28/18 23:56	1
Toluene	0.38	U	1.0	0.38	ug/L			08/28/18 23:56	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/28/18 23:56	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/28/18 23:56	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/28/18 23:56	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/28/18 23:56	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/28/18 23:56	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/28/18 23:56	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/28/18 23:56*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*08/28/18 23:56*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*08/28/18 23:56*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*08/28/18 23:56*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/28/18 23:56*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.31**		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 04:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*08/27/18 08:04*	*08/28/18 04:01*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-30C-082318
Date Collected: 08/23/18 14:55
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U *	0.050	0.016	ug/L		08/26/18 16:46	08/27/18 18:10	1
Benzo[a]pyrene	0.022	U *	0.050	0.022	ug/L		08/26/18 16:46	08/27/18 18:10	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 16:46	08/27/18 18:10	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		08/26/18 16:46	08/27/18 18:10	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 16:46	08/27/18 18:10	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 16:46	08/27/18 18:10	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 16:46	08/27/18 18:10	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 16:46	08/27/18 18:10	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 16:46	08/27/18 18:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 16:46	08/27/18 06:57	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 16:46	08/27/18 06:57	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/26/18 16:46	08/27/18 06:57	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 06:57	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 06:57	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 06:57	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 16:46	08/27/18 06:57	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 06:57	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 16:46	08/27/18 06:57	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 16:46	08/27/18 06:57	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 16:46	08/27/18 06:57	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 16:46	08/27/18 06:57	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 16:46	08/27/18 06:57	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 16:46	08/27/18 06:57	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 16:46	08/27/18 06:57	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 16:46	08/27/18 06:57	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 16:46	08/27/18 06:57	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 06:57	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 16:46	08/27/18 06:57	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/26/18 16:46	08/27/18 06:57	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 06:57	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 16:46	08/27/18 06:57	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 06:57	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 16:46	08/27/18 06:57	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 16:46	08/27/18 06:57	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 16:46	08/27/18 06:57	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 16:46	08/27/18 06:57	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 16:46	08/27/18 06:57	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 06:57	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 06:57	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 16:46	08/27/18 06:57	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 16:46	08/27/18 06:57	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 16:46	08/27/18 06:57	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 16:46	08/27/18 06:57	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 16:46	08/27/18 06:57	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 16:46	08/27/18 06:57	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 06:57	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 06:57	1

Client Sample ID: OB-30C-082318
Date Collected: 08/23/18 14:55
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 06:57	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 06:57	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 06:57	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 06:57	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 16:46	08/27/18 06:57	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 16:46	08/27/18 06:57	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 16:46	08/27/18 06:57	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 16:46	08/27/18 06:57	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 16:46	08/27/18 06:57	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 16:46	08/27/18 06:57	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 06:57	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 06:57	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 16:46	08/27/18 06:57	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 16:46	08/27/18 06:57	1
Caprolactam	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 06:57	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 16:46	08/27/18 06:57	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 06:57	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 06:57	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 06:57	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 06:57	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 06:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 16:46*	*08/27/18 06:57*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*99*		*30 - 130*	*08/26/18 16:46*	*08/27/18 06:57*	*1*
Phenol-d5 (Surr)	*33*		*15 - 110*	*08/26/18 16:46*	*08/27/18 06:57*	*1*
Terphenyl-d14 (Surr)	*91*		*30 - 130*	*08/26/18 16:46*	*08/27/18 06:57*	*1*
2,4,6-Tribromophenol (Surr)	*103*		*15 - 110*	*08/26/18 16:46*	*08/27/18 06:57*	*1*
2-Fluorophenol (Surr)	*49*		*15 - 110*	*08/26/18 16:46*	*08/27/18 06:57*	*1*
2-Fluorobiphenyl	*84*		*30 - 130*	*08/26/18 16:46*	*08/27/18 06:57*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 05:23	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 05:23	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 05:23	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 05:23	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 05:23	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 05:23	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 05:23	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 05:23	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 05:23	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 05:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*30 - 150*	*08/27/18 09:27*	*08/29/18 05:23*	*1*
Tetrachloro-m-xylene	*76*		*30 - 150*	*08/27/18 09:27*	*08/29/18 05:23*	*1*
DCB Decachlorobiphenyl	*86*		*30 - 150*	*08/27/18 09:27*	*08/29/18 05:23*	*1*

Client Sample ID: OB-30C-082318

Date Collected: 08/23/18 14:55
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-6

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*30 - 150*	*08/27/18 09:27*	*08/29/18 05:23*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**28.5**		0.60	0.33	mg/L			08/26/18 18:57	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**33.6**	**D**	1.20	0.78	mg/L			08/27/18 22:42	10

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 00:50	08/30/18 22:03	2
Arsenic	**0.95**	**J**	2.0	0.77	ug/L		08/30/18 00:50	08/30/18 22:03	2
Barium	**24.4**		4.0	1.1	ug/L		08/30/18 00:50	08/30/18 22:03	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 00:50	08/30/18 22:03	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 00:50	08/30/18 22:03	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:03	2
Chromium	**1.3**	**J**	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:03	2
Copper	**7.9**		4.0	1.9	ug/L		08/30/18 00:50	08/30/18 22:03	2
Manganese	**109**		8.0	2.7	ug/L		08/30/18 00:50	08/30/18 22:03	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:03	2
Lead	**0.46**	**J B**	1.2	0.37	ug/L		08/30/18 00:50	08/30/18 22:03	2
Antimony	**0.62**	**J**	2.0	0.62	ug/L		08/30/18 00:50	08/30/18 22:03	2
Selenium	**2.7**	**J**	10.0	0.69	ug/L		08/30/18 00:50	08/30/18 22:03	2
Vanadium	**5.2**		4.0	1.2	ug/L		08/30/18 00:50	08/30/18 22:03	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 00:50	08/30/18 22:03	2
Aluminum	**224**		40.0	15.0	ug/L		08/30/18 00:50	08/30/18 22:03	2
Sodium	**7210**		200	75.7	ug/L		08/30/18 00:50	08/30/18 22:03	2
Magnesium	**19000**		200	65.7	ug/L		08/30/18 00:50	08/30/18 22:03	2
Potassium	**1850**		200	64.9	ug/L		08/30/18 00:50	08/30/18 22:03	2
Calcium	**48800**		200	67.6	ug/L		08/30/18 00:50	08/30/18 22:03	2
Iron	**375**		120	45.7	ug/L		08/30/18 00:50	08/30/18 22:03	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 00:50	08/30/18 22:03	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 03:56	2
Arsenic	**0.79**	**J**	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 03:56	2
Barium	**15.5**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 03:56	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 03:56	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 03:56	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 14:01	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 03:56	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 22:48	2
Manganese	**77.8**		8.0	2.7	ug/L		08/30/18 01:59	08/30/18 03:56	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 14:01	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 03:56	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 03:56	2
Selenium	**2.3**	**J**	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 03:56	2

Client Sample ID: OB-30C-082318

Date Collected: 08/23/18 14:55
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-6

Matrix: Water

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	**3.8**	**J**	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 03:56	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 01:59	08/30/18 03:56	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 03:56	2
Sodium	**5390**		200	75.7	ug/L		08/30/18 01:59	08/30/18 03:56	2
Magnesium	**16000**		200	65.7	ug/L		08/30/18 01:59	08/30/18 03:56	2
Potassium	**1560**		200	64.9	ug/L		08/30/18 01:59	08/30/18 03:56	2
Calcium	**42800**		200	67.6	ug/L		08/30/18 01:59	08/30/18 03:56	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 01:59	08/30/18 03:56	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 03:56	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:41	08/29/18 15:57	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 17:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 10:52	1
Bicarbonate Alkalinity as CaCO3	**138**		5.0	5.0	mg/L			08/26/18 10:56	1
Alkalinity	**138**		5.0	5.0	mg/L			08/26/18 10:56	1

Client Sample ID: CMS-100-082318

Date Collected: 08/23/18 10:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-7

Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.34**		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 04:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*10 - 150*	*08/27/18 08:04*	*08/28/18 04:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U *	0.050	0.016	ug/L		08/26/18 16:46	08/27/18 18:31	1
Benzo[a]pyrene	0.022	U *	0.050	0.022	ug/L		08/26/18 16:46	08/27/18 18:31	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 16:46	08/27/18 18:31	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		08/26/18 16:46	08/27/18 18:31	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 16:46	08/27/18 18:31	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 16:46	08/27/18 18:31	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 16:46	08/27/18 18:31	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 16:46	08/27/18 18:31	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 16:46	08/27/18 18:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 16:46	08/27/18 07:18	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 16:46	08/27/18 07:18	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/26/18 16:46	08/27/18 07:18	1

Client Sample ID: CMS-100-082318
Date Collected: 08/23/18 10:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 07:18	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 07:18	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 07:18	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 16:46	08/27/18 07:18	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 07:18	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 16:46	08/27/18 07:18	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 16:46	08/27/18 07:18	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 16:46	08/27/18 07:18	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 16:46	08/27/18 07:18	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 16:46	08/27/18 07:18	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 16:46	08/27/18 07:18	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 16:46	08/27/18 07:18	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 16:46	08/27/18 07:18	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 16:46	08/27/18 07:18	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 07:18	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 16:46	08/27/18 07:18	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/26/18 16:46	08/27/18 07:18	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 07:18	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 16:46	08/27/18 07:18	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 07:18	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 16:46	08/27/18 07:18	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 16:46	08/27/18 07:18	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 16:46	08/27/18 07:18	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 16:46	08/27/18 07:18	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 16:46	08/27/18 07:18	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 07:18	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 07:18	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 16:46	08/27/18 07:18	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 16:46	08/27/18 07:18	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 16:46	08/27/18 07:18	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 16:46	08/27/18 07:18	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 16:46	08/27/18 07:18	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 16:46	08/27/18 07:18	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 07:18	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 07:18	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 07:18	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 07:18	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 07:18	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 07:18	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 16:46	08/27/18 07:18	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 16:46	08/27/18 07:18	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 16:46	08/27/18 07:18	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 16:46	08/27/18 07:18	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 16:46	08/27/18 07:18	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 16:46	08/27/18 07:18	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 07:18	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 07:18	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 16:46	08/27/18 07:18	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 16:46	08/27/18 07:18	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: CMS-100-082318
Date Collected: 08/23/18 10:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 07:18	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 16:46	08/27/18 07:18	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 07:18	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 07:18	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 07:18	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 07:18	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 07:18	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 16:46*	*08/27/18 07:18*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*98*		*30 - 130*	*08/26/18 16:46*	*08/27/18 07:18*	*1*
Phenol-d5 (Surr)	*31*		*15 - 110*	*08/26/18 16:46*	*08/27/18 07:18*	*1*
Terphenyl-d14 (Surr)	*84*		*30 - 130*	*08/26/18 16:46*	*08/27/18 07:18*	*1*
2,4,6-Tribromophenol (Surr)	*103*		*15 - 110*	*08/26/18 16:46*	*08/27/18 07:18*	*1*
2-Fluorophenol (Surr)	*48*		*15 - 110*	*08/26/18 16:46*	*08/27/18 07:18*	*1*
2-Fluorobiphenyl	*83*		*30 - 130*	*08/26/18 16:46*	*08/27/18 07:18*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 05:39	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 05:39	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 05:39	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 05:39	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 05:39	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/29/18 05:39	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 05:39	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 05:39	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 05:39	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/29/18 05:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*30 - 150*	*08/27/18 09:27*	*08/29/18 05:39*	*1*
Tetrachloro-m-xylene	*64*		*30 - 150*	*08/27/18 09:27*	*08/29/18 05:39*	*1*
DCB Decachlorobiphenyl	*74*		*30 - 150*	*08/27/18 09:27*	*08/29/18 05:39*	*1*
DCB Decachlorobiphenyl	*64*		*30 - 150*	*08/27/18 09:27*	*08/29/18 05:39*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**5.21**		0.60	0.33	mg/L			08/26/18 19:09	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**185**	**D**	6.00	3.90	mg/L			08/27/18 23:21	50

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 00:50	08/30/18 22:06	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 00:50	08/30/18 22:06	2
Barium	**68.9**		4.0	1.1	ug/L		08/30/18 00:50	08/30/18 22:06	2

Client Sample ID: CMS-100-082318
Date Collected: 08/23/18 10:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-7
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 00:50	08/30/18 22:06	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 00:50	08/30/18 22:06	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:06	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:06	2
Copper	**2.3**	**J**	4.0	1.9	ug/L		08/30/18 00:50	08/30/18 22:06	2
Manganese	**792**		8.0	2.7	ug/L		08/30/18 00:50	08/30/18 22:06	2
Nickel	**1.6**	**J**	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:06	2
Lead	**0.44**	**J B**	1.2	0.37	ug/L		08/30/18 00:50	08/30/18 22:06	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 00:50	08/30/18 22:06	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 00:50	08/30/18 22:06	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 00:50	08/30/18 22:06	2
Zinc	**1080**		16.0	5.4	ug/L		08/30/18 00:50	08/30/18 22:06	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 00:50	08/30/18 22:06	2
Sodium	**98600**		200	75.7	ug/L		08/30/18 00:50	08/30/18 22:06	2
Magnesium	**16300**		200	65.7	ug/L		08/30/18 00:50	08/30/18 22:06	2
Potassium	**2290**		200	64.9	ug/L		08/30/18 00:50	08/30/18 22:06	2
Calcium	**49300**		200	67.6	ug/L		08/30/18 00:50	08/30/18 22:06	2
Iron	**21200**		120	45.7	ug/L		08/30/18 00:50	08/30/18 22:06	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 00:50	08/30/18 22:06	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 04:00	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 04:00	2
Barium	**50.2**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 04:00	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 04:00	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 04:00	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 14:06	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 04:00	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 22:51	2
Manganese	**720**		8.0	2.7	ug/L		08/30/18 01:59	08/30/18 04:00	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 14:06	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 04:00	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 04:00	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 04:00	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 04:00	2
Zinc	**523**		16.0	5.4	ug/L		08/30/18 01:59	08/30/18 04:00	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 04:00	2
Sodium	**80500**		200	75.7	ug/L		08/30/18 01:59	08/30/18 04:00	2
Magnesium	**13800**		200	65.7	ug/L		08/30/18 01:59	08/30/18 04:00	2
Potassium	**2140**		200	64.9	ug/L		08/30/18 01:59	08/30/18 04:00	2
Calcium	**47200**		200	67.6	ug/L		08/30/18 01:59	08/30/18 04:00	2
Iron	**617**		120	45.7	ug/L		08/30/18 01:59	08/30/18 04:00	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 04:00	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:41	08/29/18 15:58	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: CMS-100-082318

Lab Sample ID: 460-163302-7

Date Collected: 08/23/18 10:15

Matrix: Water

Date Received: 08/24/18 17:10

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/30/18 12:57	08/30/18 15:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 10:53	1
Bicarbonate Alkalinity as CaCO3	**147**		5.0	5.0	mg/L			08/26/18 11:04	1
Alkalinity	**147**		5.0	5.0	mg/L			08/26/18 11:04	1

Client Sample ID: CMS-160-082318

Lab Sample ID: 460-163302-8

Date Collected: 08/23/18 11:35

Matrix: Water

Date Received: 08/24/18 17:10

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.33**		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 04:37	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/27/18 08:04*	*08/28/18 04:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U *	0.050	0.016	ug/L		08/26/18 16:46	08/27/18 18:52	1
Benzo[a]pyrene	0.022	U *	0.050	0.022	ug/L		08/26/18 16:46	08/27/18 18:52	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 16:46	08/27/18 18:52	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		08/26/18 16:46	08/27/18 18:52	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 16:46	08/27/18 18:52	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 16:46	08/27/18 18:52	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 16:46	08/27/18 18:52	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 16:46	08/27/18 18:52	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 16:46	08/27/18 18:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 16:46	08/27/18 07:39	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 16:46	08/27/18 07:39	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/26/18 16:46	08/27/18 07:39	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 07:39	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 07:39	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 07:39	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 16:46	08/27/18 07:39	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 07:39	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 16:46	08/27/18 07:39	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 16:46	08/27/18 07:39	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 16:46	08/27/18 07:39	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 16:46	08/27/18 07:39	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 16:46	08/27/18 07:39	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 16:46	08/27/18 07:39	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 16:46	08/27/18 07:39	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 16:46	08/27/18 07:39	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 16:46	08/27/18 07:39	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 07:39	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: CMS-160-082318
Date Collected: 08/23/18 11:35
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 16:46	08/27/18 07:39	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/26/18 16:46	08/27/18 07:39	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 07:39	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 16:46	08/27/18 07:39	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 07:39	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 16:46	08/27/18 07:39	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 16:46	08/27/18 07:39	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 16:46	08/27/18 07:39	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 16:46	08/27/18 07:39	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 16:46	08/27/18 07:39	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 07:39	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 07:39	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 16:46	08/27/18 07:39	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 16:46	08/27/18 07:39	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 16:46	08/27/18 07:39	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 16:46	08/27/18 07:39	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 16:46	08/27/18 07:39	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 16:46	08/27/18 07:39	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 07:39	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 07:39	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 07:39	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 07:39	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 07:39	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 07:39	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 16:46	08/27/18 07:39	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 16:46	08/27/18 07:39	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 16:46	08/27/18 07:39	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 16:46	08/27/18 07:39	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 16:46	08/27/18 07:39	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 16:46	08/27/18 07:39	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 07:39	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 07:39	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 16:46	08/27/18 07:39	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 16:46	08/27/18 07:39	1
Caprolactam	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 07:39	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 16:46	08/27/18 07:39	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 07:39	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 07:39	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 07:39	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 07:39	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 07:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 16:46*	*08/27/18 07:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*94*		*30 - 130*	*08/26/18 16:46*	*08/27/18 07:39*	*1*
Phenol-d5 (Surr)	*32*		*15 - 110*	*08/26/18 16:46*	*08/27/18 07:39*	*1*
Terphenyl-d14 (Surr)	*83*		*30 - 130*	*08/26/18 16:46*	*08/27/18 07:39*	*1*
2,4,6-Tribromophenol (Surr)	*102*		*15 - 110*	*08/26/18 16:46*	*08/27/18 07:39*	*1*

Client Sample ID: CMS-160-082318
Date Collected: 08/23/18 11:35
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-8
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*48*		*15 - 110*	*08/26/18 16:46*	*08/27/18 07:39*	*1*
2-Fluorobiphenyl	*78*		*30 - 130*	*08/26/18 16:46*	*08/27/18 07:39*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 11:52	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 11:52	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 11:52	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 11:52	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 11:52	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 11:52	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/30/18 11:52	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/30/18 11:52	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/30/18 11:52	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/30/18 11:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*30 - 150*	*08/28/18 09:19*	*08/30/18 11:52*	*1*
Tetrachloro-m-xylene	*80*		*30 - 150*	*08/28/18 09:19*	*08/30/18 11:52*	*1*
DCB Decachlorobiphenyl	*84*		*30 - 150*	*08/28/18 09:19*	*08/30/18 11:52*	*1*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*08/28/18 09:19*	*08/30/18 11:52*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**2.99**		0.60	0.33	mg/L			08/26/18 19:20	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**203**	**D**	6.00	3.90	mg/L			08/27/18 23:34	50

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 00:50	08/30/18 22:09	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 00:50	08/30/18 22:09	2
Barium	**77.1**		4.0	1.1	ug/L		08/30/18 00:50	08/30/18 22:09	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 00:50	08/30/18 22:09	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 00:50	08/30/18 22:09	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:09	2
Chromium	**1.9**	**J**	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:09	2
Copper	**5.8**		4.0	1.9	ug/L		08/30/18 00:50	08/30/18 22:09	2
Manganese	**869**		8.0	2.7	ug/L		08/30/18 00:50	08/30/18 22:09	2
Nickel	**1.8**	**J**	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:09	2
Lead	**3.4**	**B**	1.2	0.37	ug/L		08/30/18 00:50	08/30/18 22:09	2
Antimony	**0.64**	**J**	2.0	0.62	ug/L		08/30/18 00:50	08/30/18 22:09	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 00:50	08/30/18 22:09	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 00:50	08/30/18 22:09	2
Zinc	**3440**		80.0	26.9	ug/L		08/30/18 00:50	08/31/18 13:08	10
Aluminum	**17.6**	**J**	40.0	15.0	ug/L		08/30/18 00:50	08/30/18 22:09	2
Sodium	**109000**		200	75.7	ug/L		08/30/18 00:50	08/30/18 22:09	2
Magnesium	**17400**		200	65.7	ug/L		08/30/18 00:50	08/30/18 22:09	2

Client Sample ID: CMS-160-082318

Lab Sample ID: 460-163302-8

Date Collected: 08/23/18 11:35

Matrix: Water

Date Received: 08/24/18 17:10

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**2610**		200	64.9	ug/L		08/30/18 00:50	08/30/18 22:09	2
Calcium	**54400**		200	67.6	ug/L		08/30/18 00:50	08/30/18 22:09	2
Iron	**30200**		120	45.7	ug/L		08/30/18 00:50	08/30/18 22:09	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 00:50	08/30/18 22:09	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 04:03	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 04:03	2
Barium	**51.9**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 04:03	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 04:03	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 04:03	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 14:09	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 04:03	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 22:58	2
Manganese	**798**		8.0	2.7	ug/L		08/30/18 01:59	08/30/18 04:03	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 14:09	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 04:03	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 04:03	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 04:03	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 04:03	2
Zinc	**1420**		16.0	5.4	ug/L		08/30/18 01:59	08/30/18 04:03	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 04:03	2
Sodium	**89800**		200	75.7	ug/L		08/30/18 01:59	08/30/18 04:03	2
Magnesium	**14800**		200	65.7	ug/L		08/30/18 01:59	08/30/18 04:03	2
Potassium	**2530**		200	64.9	ug/L		08/30/18 01:59	08/30/18 04:03	2
Calcium	**52200**		200	67.6	ug/L		08/30/18 01:59	08/30/18 04:03	2
Iron	**969**		120	45.7	ug/L		08/30/18 01:59	08/30/18 04:03	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 04:03	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:41	08/29/18 16:00	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/30/18 12:57	08/30/18 15:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 10:54	1
Bicarbonate Alkalinity as CaCO3	**162**		5.0	5.0	mg/L			08/26/18 11:11	1
Alkalinity	**162**		5.0	5.0	mg/L			08/26/18 11:11	1

Client Sample ID: CMS-275-082318

Lab Sample ID: 460-163302-9

Date Collected: 08/23/18 12:45

Matrix: Water

Date Received: 08/24/18 17:10

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.40**		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 04:55	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	36		10 - 150	08/27/18 08:04	08/28/18 04:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U *	0.050	0.016	ug/L		08/26/18 16:46	08/27/18 19:13	1
Benzo[a]pyrene	0.022	U *	0.050	0.022	ug/L		08/26/18 16:46	08/27/18 19:13	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 16:46	08/27/18 19:13	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		08/26/18 16:46	08/27/18 19:13	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 16:46	08/27/18 19:13	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 16:46	08/27/18 19:13	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 16:46	08/27/18 19:13	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 16:46	08/27/18 19:13	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 16:46	08/27/18 19:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 16:46	08/27/18 08:00	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 16:46	08/27/18 08:00	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/26/18 16:46	08/27/18 08:00	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 08:00	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 08:00	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 08:00	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 16:46	08/27/18 08:00	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 08:00	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 16:46	08/27/18 08:00	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 16:46	08/27/18 08:00	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 16:46	08/27/18 08:00	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 16:46	08/27/18 08:00	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 16:46	08/27/18 08:00	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 16:46	08/27/18 08:00	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 16:46	08/27/18 08:00	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 16:46	08/27/18 08:00	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 16:46	08/27/18 08:00	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 08:00	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 16:46	08/27/18 08:00	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/26/18 16:46	08/27/18 08:00	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 08:00	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 16:46	08/27/18 08:00	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 08:00	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 16:46	08/27/18 08:00	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 16:46	08/27/18 08:00	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 16:46	08/27/18 08:00	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 16:46	08/27/18 08:00	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 16:46	08/27/18 08:00	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 08:00	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 08:00	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 16:46	08/27/18 08:00	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 16:46	08/27/18 08:00	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 16:46	08/27/18 08:00	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 16:46	08/27/18 08:00	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 16:46	08/27/18 08:00	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 16:46	08/27/18 08:00	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 08:00	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 08:00	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 08:00	1

Client Sample ID: CMS-275-082318
Date Collected: 08/23/18 12:45
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 08:00	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 08:00	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 08:00	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 16:46	08/27/18 08:00	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 16:46	08/27/18 08:00	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 16:46	08/27/18 08:00	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 16:46	08/27/18 08:00	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 16:46	08/27/18 08:00	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 16:46	08/27/18 08:00	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 08:00	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 08:00	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 16:46	08/27/18 08:00	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 16:46	08/27/18 08:00	1
Caprolactam	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 08:00	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 16:46	08/27/18 08:00	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 08:00	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 08:00	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 08:00	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 08:00	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 08:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 16:46*	*08/27/18 08:00*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*97*		*30 - 130*	*08/26/18 16:46*	*08/27/18 08:00*	*1*
Phenol-d5 (Surr)	*32*		*15 - 110*	*08/26/18 16:46*	*08/27/18 08:00*	*1*
Terphenyl-d14 (Surr)	*88*		*30 - 130*	*08/26/18 16:46*	*08/27/18 08:00*	*1*
2,4,6-Tribromophenol (Surr)	*107*		*15 - 110*	*08/26/18 16:46*	*08/27/18 08:00*	*1*
2-Fluorophenol (Surr)	*49*		*15 - 110*	*08/26/18 16:46*	*08/27/18 08:00*	*1*
2-Fluorobiphenyl	*84*		*30 - 130*	*08/26/18 16:46*	*08/27/18 08:00*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 12:08	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 12:08	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 12:08	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 12:08	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 12:08	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 12:08	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/30/18 12:08	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/30/18 12:08	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/30/18 12:08	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/30/18 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 150*	*08/28/18 09:19*	*08/30/18 12:08*	*1*
Tetrachloro-m-xylene	*78*		*30 - 150*	*08/28/18 09:19*	*08/30/18 12:08*	*1*
DCB Decachlorobiphenyl	*72*		*30 - 150*	*08/28/18 09:19*	*08/30/18 12:08*	*1*
DCB Decachlorobiphenyl	*68*		*30 - 150*	*08/28/18 09:19*	*08/30/18 12:08*	*1*

Client Sample ID: CMS-275-082318

Date Collected: 08/23/18 12:45
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-9

Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**0.54**	**J**	0.60	0.33	mg/L			08/26/18 19:31	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**74.4**	**D**	2.40	1.56	mg/L			08/27/18 23:47	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 00:50	08/30/18 22:11	2
Arsenic	**1.1**	**J**	2.0	0.77	ug/L		08/30/18 00:50	08/30/18 22:11	2
Barium	**141**		4.0	1.1	ug/L		08/30/18 00:50	08/30/18 22:11	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 00:50	08/30/18 22:11	2
Cadmium	**3.2**		2.0	0.61	ug/L		08/30/18 00:50	08/30/18 22:11	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:11	2
Chromium	**27.1**		4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:11	2
Copper	**44.4**		4.0	1.9	ug/L		08/30/18 00:50	08/30/18 22:11	2
Manganese	**1240**		8.0	2.7	ug/L		08/30/18 00:50	08/30/18 22:11	2
Nickel	**8.7**		4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:11	2
Lead	**44.4**	**B**	1.2	0.37	ug/L		08/30/18 00:50	08/30/18 22:11	2
Antimony	**0.98**	**J**	2.0	0.62	ug/L		08/30/18 00:50	08/30/18 22:11	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 00:50	08/30/18 22:11	2
Vanadium	**1.5**	**J**	4.0	1.2	ug/L		08/30/18 00:50	08/30/18 22:11	2
Zinc	**4730**		80.0	26.9	ug/L		08/30/18 00:50	08/31/18 13:10	10
Aluminum	**57.1**		40.0	15.0	ug/L		08/30/18 00:50	08/30/18 22:11	2
Sodium	**58900**		200	75.7	ug/L		08/30/18 00:50	08/30/18 22:11	2
Magnesium	**20200**		200	65.7	ug/L		08/30/18 00:50	08/30/18 22:11	2
Potassium	**7050**		200	64.9	ug/L		08/30/18 00:50	08/30/18 22:11	2
Calcium	**83400**		200	67.6	ug/L		08/30/18 00:50	08/30/18 22:11	2
Iron	**22700**		120	45.7	ug/L		08/30/18 00:50	08/30/18 22:11	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 00:50	08/30/18 22:11	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 04:06	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 04:06	2
Barium	**78.4**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 04:06	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 04:06	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 04:06	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 14:12	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 04:06	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 23:05	2
Manganese	**977**		8.0	2.7	ug/L		08/30/18 01:59	08/30/18 04:06	2
Nickel	**4.2**		4.0	1.3	ug/L		08/30/18 01:59	08/30/18 14:12	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 04:06	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 04:06	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 04:06	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 04:06	2
Zinc	**765**		16.0	5.4	ug/L		08/30/18 01:59	08/30/18 04:06	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 04:06	2
Sodium	**44000**		200	75.7	ug/L		08/30/18 01:59	08/30/18 04:06	2

Client Sample ID: CMS-275-082318

Lab Sample ID: 460-163302-9

Date Collected: 08/23/18 12:45

Matrix: Water

Date Received: 08/24/18 17:10

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**16500**		200	65.7	ug/L		08/30/18 01:59	08/30/18 04:06	2
Potassium	**6040**		200	64.9	ug/L		08/30/18 01:59	08/30/18 04:06	2
Calcium	**71400**		200	67.6	ug/L		08/30/18 01:59	08/30/18 04:06	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 01:59	08/30/18 04:06	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 04:06	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:41	08/29/18 16:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/30/18 12:57	08/30/18 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 10:59	1
Bicarbonate Alkalinity as CaCO3	**334**		5.0	5.0	mg/L			08/26/18 11:51	1
Alkalinity	**334**		5.0	5.0	mg/L			08/26/18 11:51	1

Client Sample ID: SC-02-082318

Lab Sample ID: 460-163302-10

Date Collected: 08/23/18 15:50

Matrix: Water

Date Received: 08/24/18 17:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/30/18 15:58	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/30/18 15:58	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/30/18 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*70 - 130*		*08/30/18 15:58*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 01:29	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 01:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 01:29	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 01:29	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 01:29	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 01:29	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 01:29	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 01:29	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 01:29	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 01:29	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 01:29	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/29/18 01:29	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/29/18 01:29	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 01:29	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 01:29	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 01:29	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: SC-02-082318
Date Collected: 08/23/18 15:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**6.1**		5.0	5.0	ug/L			08/29/18 01:29	1
Benzene	0.43	U	1.0	0.43	ug/L			08/29/18 01:29	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 01:29	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 01:29	1
Carbon disulfide	**0.29**	**J**	1.0	0.16	ug/L			08/29/18 01:29	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 01:29	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/29/18 01:29	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 01:29	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 01:29	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/29/18 01:29	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 01:29	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 01:29	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 01:29	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 01:29	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/29/18 01:29	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 01:29	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 01:29	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 01:29	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/29/18 01:29	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 01:29	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 01:29	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/29/18 01:29	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/29/18 01:29	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 01:29	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 01:29	1
Toluene	0.38	U	1.0	0.38	ug/L			08/29/18 01:29	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 01:29	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 01:29	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 01:29	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 01:29	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 01:29	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 01:29	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/18 01:29*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*08/29/18 01:29*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*08/29/18 01:29*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/29/18 01:29*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/29/18 01:29*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.29**		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 05:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/27/18 08:04*	*08/28/18 05:12*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: SC-02-082318
Date Collected: 08/23/18 15:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U *	0.050	0.016	ug/L		08/26/18 16:46	08/27/18 19:34	1
Benzo[a]pyrene	0.022	U *	0.050	0.022	ug/L		08/26/18 16:46	08/27/18 19:34	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 16:46	08/27/18 19:34	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		08/26/18 16:46	08/27/18 19:34	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 16:46	08/27/18 19:34	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 16:46	08/27/18 19:34	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 16:46	08/27/18 19:34	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 16:46	08/27/18 19:34	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 16:46	08/27/18 19:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 16:46	08/27/18 08:21	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 16:46	08/27/18 08:21	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/26/18 16:46	08/27/18 08:21	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 08:21	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 08:21	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 08:21	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 16:46	08/27/18 08:21	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 08:21	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 16:46	08/27/18 08:21	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 16:46	08/27/18 08:21	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 16:46	08/27/18 08:21	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 16:46	08/27/18 08:21	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 16:46	08/27/18 08:21	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 16:46	08/27/18 08:21	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 16:46	08/27/18 08:21	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 16:46	08/27/18 08:21	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 16:46	08/27/18 08:21	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 08:21	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 16:46	08/27/18 08:21	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/26/18 16:46	08/27/18 08:21	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 08:21	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 16:46	08/27/18 08:21	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 08:21	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 16:46	08/27/18 08:21	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 16:46	08/27/18 08:21	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 16:46	08/27/18 08:21	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 16:46	08/27/18 08:21	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 16:46	08/27/18 08:21	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 08:21	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/27/18 08:21	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 16:46	08/27/18 08:21	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 16:46	08/27/18 08:21	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 16:46	08/27/18 08:21	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 16:46	08/27/18 08:21	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 16:46	08/27/18 08:21	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 16:46	08/27/18 08:21	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 08:21	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/27/18 08:21	1

Client Sample ID: SC-02-082318
Date Collected: 08/23/18 15:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 08:21	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 08:21	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 08:21	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/27/18 08:21	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 16:46	08/27/18 08:21	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 16:46	08/27/18 08:21	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 16:46	08/27/18 08:21	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 16:46	08/27/18 08:21	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 16:46	08/27/18 08:21	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 16:46	08/27/18 08:21	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 08:21	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 08:21	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 16:46	08/27/18 08:21	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 16:46	08/27/18 08:21	1
Caprolactam	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/27/18 08:21	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 16:46	08/27/18 08:21	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/27/18 08:21	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/27/18 08:21	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/27/18 08:21	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/27/18 08:21	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/27/18 08:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexadecanoic acid, butyl ester	*11*	*J N*	*ug/L*		*10.33*	*111-06-8*	*08/26/18 16:46*	*08/27/18 08:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*96*		*30 - 130*	*08/26/18 16:46*	*08/27/18 08:21*	*1*
Phenol-d5 (Surr)	*33*		*15 - 110*	*08/26/18 16:46*	*08/27/18 08:21*	*1*
Terphenyl-d14 (Surr)	*99*		*30 - 130*	*08/26/18 16:46*	*08/27/18 08:21*	*1*
2,4,6-Tribromophenol (Surr)	*104*		*15 - 110*	*08/26/18 16:46*	*08/27/18 08:21*	*1*
2-Fluorophenol (Surr)	*50*		*15 - 110*	*08/26/18 16:46*	*08/27/18 08:21*	*1*
2-Fluorobiphenyl	*83*		*30 - 130*	*08/26/18 16:46*	*08/27/18 08:21*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:10	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:10	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:10	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:10	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:10	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:10	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 19:10	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 19:10	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 19:10	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*30 - 150*	*08/28/18 09:19*	*08/29/18 19:10*	*1*
Tetrachloro-m-xylene	*79*		*30 - 150*	*08/28/18 09:19*	*08/29/18 19:10*	*1*
DCB Decachlorobiphenyl	*83*		*30 - 150*	*08/28/18 09:19*	*08/29/18 19:10*	*1*

Client Sample ID: SC-02-082318

Date Collected: 08/23/18 15:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-10

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*89*		*30 - 150*	*08/28/18 09:19*	*08/29/18 19:10*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.83**		0.12	0.078	mg/L			08/26/18 19:43	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**37.7**	**D**	3.00	1.66	mg/L			08/28/18 00:01	5

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 00:50	08/30/18 22:14	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 00:50	08/30/18 22:14	2
Barium	**61.0**		4.0	1.1	ug/L		08/30/18 00:50	08/30/18 22:14	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 00:50	08/30/18 22:14	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 00:50	08/30/18 22:14	2
Cobalt	**2.8**	**J**	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:14	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:14	2
Copper	**23.9**		4.0	1.9	ug/L		08/30/18 00:50	08/30/18 22:14	2
Manganese	**50.2**		8.0	2.7	ug/L		08/30/18 00:50	08/30/18 22:14	2
Nickel	**5.5**		4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:14	2
Lead	**4.0**	**B**	1.2	0.37	ug/L		08/30/18 00:50	08/30/18 22:14	2
Antimony	**2.2**		2.0	0.62	ug/L		08/30/18 00:50	08/30/18 22:14	2
Selenium	**0.83**	**J**	10.0	0.69	ug/L		08/30/18 00:50	08/30/18 22:14	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 00:50	08/30/18 22:14	2
Zinc	**110**		16.0	5.4	ug/L		08/30/18 00:50	08/30/18 22:14	2
Aluminum	**219**		40.0	15.0	ug/L		08/30/18 00:50	08/30/18 22:14	2
Sodium	**8460**		200	75.7	ug/L		08/30/18 00:50	08/30/18 22:14	2
Magnesium	**18700**		200	65.7	ug/L		08/30/18 00:50	08/30/18 22:14	2
Potassium	**5210**		200	64.9	ug/L		08/30/18 00:50	08/30/18 22:14	2
Calcium	**75400**		200	67.6	ug/L		08/30/18 00:50	08/30/18 22:14	2
Iron	**852**		120	45.7	ug/L		08/30/18 00:50	08/30/18 22:14	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 00:50	08/30/18 22:14	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 04:10	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 04:10	2
Barium	**47.1**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 04:10	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 04:10	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 04:10	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 14:16	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 04:10	2
Copper	**11.0**		4.0	1.9	ug/L		08/30/18 01:59	08/30/18 23:21	2
Manganese	2.7	U	8.0	2.7	ug/L		08/30/18 01:59	08/30/18 04:10	2
Nickel	**4.2**		4.0	1.3	ug/L		08/30/18 01:59	08/30/18 14:16	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 04:10	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 04:10	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 04:10	2

Client Sample ID: SC-02-082318

Lab Sample ID: 460-163302-10

Date Collected: 08/23/18 15:50

Matrix: Water

Date Received: 08/24/18 17:10

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 04:10	2
Zinc	**78.0**		16.0	5.4	ug/L		08/30/18 01:59	08/30/18 04:10	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 04:10	2
Sodium	**6360**		200	75.7	ug/L		08/30/18 01:59	08/30/18 04:10	2
Magnesium	**14100**		200	65.7	ug/L		08/30/18 01:59	08/30/18 04:10	2
Potassium	**4360**		200	64.9	ug/L		08/30/18 01:59	08/30/18 04:10	2
Calcium	**64300**		200	67.6	ug/L		08/30/18 01:59	08/30/18 04:10	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 01:59	08/30/18 04:10	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 04:10	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:41	08/29/18 16:04	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/30/18 12:57	08/30/18 15:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 10:59	1
Bicarbonate Alkalinity as CaCO3	**255**		5.0	5.0	mg/L			08/26/18 11:59	1
Alkalinity	**255**		5.0	5.0	mg/L			08/26/18 11:59	1

Client Sample ID: OB-5-082318

Lab Sample ID: 460-163302-11

Date Collected: 08/23/18 10:20

Matrix: Water

Date Received: 08/24/18 17:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/30/18 16:22	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/30/18 16:22	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/30/18 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*70 - 130*		*08/30/18 16:22*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 01:52	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 01:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 01:52	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 01:52	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 01:52	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 01:52	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 01:52	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 01:52	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 01:52	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 01:52	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 01:52	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/29/18 01:52	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-5-082318
Date Collected: 08/23/18 10:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/29/18 01:52	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 01:52	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 01:52	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 01:52	1
Acetone	5.0	U	5.0	5.0	ug/L			08/29/18 01:52	1
Benzene	0.43	U	1.0	0.43	ug/L			08/29/18 01:52	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 01:52	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 01:52	1
Carbon disulfide	**0.22**	**J**	1.0	0.16	ug/L			08/29/18 01:52	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 01:52	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/29/18 01:52	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 01:52	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 01:52	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/29/18 01:52	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 01:52	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 01:52	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 01:52	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 01:52	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/29/18 01:52	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 01:52	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 01:52	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 01:52	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/29/18 01:52	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 01:52	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 01:52	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/29/18 01:52	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/29/18 01:52	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 01:52	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 01:52	1
Toluene	0.38	U	1.0	0.38	ug/L			08/29/18 01:52	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 01:52	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 01:52	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 01:52	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 01:52	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 01:52	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 01:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/18 01:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/29/18 01:52*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*08/29/18 01:52*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*08/29/18 01:52*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/29/18 01:52*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.32**		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 05:30	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-5-082318
Date Collected: 08/23/18 10:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-11
Matrix: Water

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	36		10 - 150	08/27/18 08:04	08/28/18 05:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/26/18 18:05	08/27/18 17:32	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/26/18 18:05	08/27/18 17:32	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 18:05	08/27/18 17:32	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/26/18 18:05	08/27/18 17:32	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 18:05	08/27/18 17:32	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 18:05	08/27/18 17:32	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 18:05	08/27/18 17:32	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 18:05	08/27/18 17:32	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 18:05	08/27/18 17:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 18:05	08/27/18 05:30	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 18:05	08/27/18 05:30	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/26/18 18:05	08/27/18 05:30	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 05:30	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 05:30	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 05:30	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 18:05	08/27/18 05:30	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 05:30	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 18:05	08/27/18 05:30	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 18:05	08/27/18 05:30	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 18:05	08/27/18 05:30	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 18:05	08/27/18 05:30	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 18:05	08/27/18 05:30	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 18:05	08/27/18 05:30	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 18:05	08/27/18 05:30	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 18:05	08/27/18 05:30	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 18:05	08/27/18 05:30	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 05:30	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 18:05	08/27/18 05:30	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/26/18 18:05	08/27/18 05:30	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 05:30	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 18:05	08/27/18 05:30	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 05:30	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 18:05	08/27/18 05:30	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 18:05	08/27/18 05:30	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 18:05	08/27/18 05:30	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 18:05	08/27/18 05:30	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 18:05	08/27/18 05:30	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 05:30	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 05:30	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 18:05	08/27/18 05:30	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 18:05	08/27/18 05:30	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 18:05	08/27/18 05:30	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 18:05	08/27/18 05:30	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 18:05	08/27/18 05:30	1

Client Sample ID: OB-5-082318
Date Collected: 08/23/18 10:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 18:05	08/27/18 05:30	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 05:30	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 05:30	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 05:30	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 18:05	08/27/18 05:30	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 05:30	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 05:30	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 18:05	08/27/18 05:30	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 18:05	08/27/18 05:30	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 18:05	08/27/18 05:30	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 18:05	08/27/18 05:30	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 18:05	08/27/18 05:30	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 18:05	08/27/18 05:30	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 05:30	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 05:30	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 18:05	08/27/18 05:30	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 18:05	08/27/18 05:30	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/26/18 18:05	08/27/18 05:30	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 18:05	08/27/18 05:30	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 05:30	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 05:30	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 05:30	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 05:30	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 05:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclononasiloxane, octadecamethyl-	*6.5*	*J N*	*ug/L*		*13.79*	*556-71-8*	*08/26/18 18:05*	*08/27/18 05:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*89*		*30 - 130*	*08/26/18 18:05*	*08/27/18 05:30*	*1*
Phenol-d5 (Surr)	*28*		*15 - 110*	*08/26/18 18:05*	*08/27/18 05:30*	*1*
Terphenyl-d14 (Surr)	*96*		*30 - 130*	*08/26/18 18:05*	*08/27/18 05:30*	*1*
2,4,6-Tribromophenol (Surr)	*97*		*15 - 110*	*08/26/18 18:05*	*08/27/18 05:30*	*1*
2-Fluorophenol (Surr)	*41*		*15 - 110*	*08/26/18 18:05*	*08/27/18 05:30*	*1*
2-Fluorobiphenyl	*87*		*30 - 130*	*08/26/18 18:05*	*08/27/18 05:30*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 12:24	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 12:24	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 12:24	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 12:24	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 12:24	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/30/18 12:24	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/30/18 12:24	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/30/18 12:24	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/30/18 12:24	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/30/18 12:24	1

Client Sample ID: OB-5-082318

Date Collected: 08/23/18 10:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-11

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*30 - 150*	*08/28/18 09:19*	*08/30/18 12:24*	*1*
Tetrachloro-m-xylene	*80*		*30 - 150*	*08/28/18 09:19*	*08/30/18 12:24*	*1*
DCB Decachlorobiphenyl	*84*		*30 - 150*	*08/28/18 09:19*	*08/30/18 12:24*	*1*
DCB Decachlorobiphenyl	*81*		*30 - 150*	*08/28/18 09:19*	*08/30/18 12:24*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**15.2**		0.60	0.33	mg/L			08/26/18 19:54	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80.1**	**D**	3.00	1.95	mg/L			08/28/18 00:14	25

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 00:50	08/30/18 22:17	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 00:50	08/30/18 22:17	2
Barium	**26.1**		4.0	1.1	ug/L		08/30/18 00:50	08/30/18 22:17	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 00:50	08/30/18 22:17	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 00:50	08/30/18 22:17	2
Cobalt	**6.8**		4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:17	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:17	2
Copper	**3.8**	**J**	4.0	1.9	ug/L		08/30/18 00:50	08/30/18 22:17	2
Manganese	**2010**		8.0	2.7	ug/L		08/30/18 00:50	08/30/18 22:17	2
Nickel	**2.4**	**J**	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 22:17	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 00:50	08/30/18 22:17	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 00:50	08/30/18 22:17	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 00:50	08/30/18 22:17	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 00:50	08/30/18 22:17	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 00:50	08/30/18 22:17	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 00:50	08/30/18 22:17	2
Sodium	**35100**		200	75.7	ug/L		08/30/18 00:50	08/30/18 22:17	2
Magnesium	**32400**		200	65.7	ug/L		08/30/18 00:50	08/30/18 22:17	2
Potassium	**3400**		200	64.9	ug/L		08/30/18 00:50	08/30/18 22:17	2
Calcium	**64900**		200	67.6	ug/L		08/30/18 00:50	08/30/18 22:17	2
Iron	**12200**		120	45.7	ug/L		08/30/18 00:50	08/30/18 22:17	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 00:50	08/30/18 22:17	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 04:13	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 04:13	2
Barium	**19.3**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 04:13	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 04:13	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 04:13	2
Cobalt	**4.4**		4.0	1.3	ug/L		08/30/18 01:59	08/30/18 14:28	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 04:13	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/31/18 12:38	2
Manganese	**1810**		8.0	2.7	ug/L		08/30/18 01:59	08/30/18 04:13	2
Nickel	**1.6**	**J**	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 14:28	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 04:13	2

Client Sample ID: OB-5-082318

Lab Sample ID: 460-163302-11

Date Collected: 08/23/18 10:20

Matrix: Water

Date Received: 08/24/18 17:10

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 04:13	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 04:13	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 04:13	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 01:59	08/30/18 04:13	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 04:13	2
Sodium	**28900**		200	75.7	ug/L		08/30/18 01:59	08/30/18 04:13	2
Magnesium	**27300**		200	65.7	ug/L		08/30/18 01:59	08/30/18 04:13	2
Potassium	**3170**		200	64.9	ug/L		08/30/18 01:59	08/30/18 04:13	2
Calcium	**61300**		200	67.6	ug/L		08/30/18 01:59	08/30/18 04:13	2
Iron	**893**		120	45.7	ug/L		08/30/18 01:59	08/30/18 04:13	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 04:13	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 14:17	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U * F1	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 11:00	1
Bicarbonate Alkalinity as CaCO3	**271**		5.0	5.0	mg/L			08/26/18 12:07	1
Alkalinity	**271**		5.0	5.0	mg/L			08/26/18 12:07	1

Client Sample ID: Dup-02-082318

Lab Sample ID: 460-163302-12

Date Collected: 08/23/18 12:00

Matrix: Water

Date Received: 08/24/18 17:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/30/18 16:45	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/30/18 16:45	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/30/18 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*70 - 130*		*08/30/18 16:45*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 02:16	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 02:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 02:16	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 02:16	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 02:16	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 02:16	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 02:16	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 02:16	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 02:16	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 02:16	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: Dup-02-082318
Date Collected: 08/23/18 12:00
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 02:16	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/29/18 02:16	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/29/18 02:16	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 02:16	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 02:16	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 02:16	1
Acetone	**11**		5.0	5.0	ug/L			08/29/18 02:16	1
Benzene	0.43	U	1.0	0.43	ug/L			08/29/18 02:16	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 02:16	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 02:16	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/29/18 02:16	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 02:16	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/29/18 02:16	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 02:16	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 02:16	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/29/18 02:16	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 02:16	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 02:16	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 02:16	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 02:16	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/29/18 02:16	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 02:16	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 02:16	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 02:16	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/29/18 02:16	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 02:16	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 02:16	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/29/18 02:16	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/29/18 02:16	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 02:16	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 02:16	1
Toluene	0.38	U	1.0	0.38	ug/L			08/29/18 02:16	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 02:16	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 02:16	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 02:16	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 02:16	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 02:16	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 02:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/18 02:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*08/29/18 02:16*	*1*
4-Bromofluorobenzene	*87*		*70 - 130*		*08/29/18 02:16*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/29/18 02:16*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/29/18 02:16*	*1*

Client Sample ID: Dup-02-082318
Date Collected: 08/23/18 12:00
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-12
Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.25		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 05:48	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*34*		*10 - 150*	*08/27/18 08:04*	*08/28/18 05:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/26/18 18:05	08/27/18 17:53	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/26/18 18:05	08/27/18 17:53	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 18:05	08/27/18 17:53	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/26/18 18:05	08/27/18 17:53	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 18:05	08/27/18 17:53	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 18:05	08/27/18 17:53	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 18:05	08/27/18 17:53	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 18:05	08/27/18 17:53	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 18:05	08/27/18 17:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 18:05	08/27/18 05:51	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 18:05	08/27/18 05:51	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/26/18 18:05	08/27/18 05:51	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 05:51	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 05:51	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 05:51	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 18:05	08/27/18 05:51	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 05:51	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 18:05	08/27/18 05:51	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 18:05	08/27/18 05:51	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 18:05	08/27/18 05:51	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 18:05	08/27/18 05:51	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 18:05	08/27/18 05:51	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 18:05	08/27/18 05:51	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 18:05	08/27/18 05:51	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 18:05	08/27/18 05:51	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 18:05	08/27/18 05:51	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 05:51	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 18:05	08/27/18 05:51	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/26/18 18:05	08/27/18 05:51	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 05:51	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 18:05	08/27/18 05:51	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 05:51	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 18:05	08/27/18 05:51	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 18:05	08/27/18 05:51	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 18:05	08/27/18 05:51	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 18:05	08/27/18 05:51	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 18:05	08/27/18 05:51	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 05:51	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 05:51	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 18:05	08/27/18 05:51	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 18:05	08/27/18 05:51	1

Client Sample ID: Dup-02-082318
Date Collected: 08/23/18 12:00
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 18:05	08/27/18 05:51	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 18:05	08/27/18 05:51	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 18:05	08/27/18 05:51	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 18:05	08/27/18 05:51	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 05:51	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 05:51	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 05:51	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 18:05	08/27/18 05:51	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 05:51	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 05:51	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 18:05	08/27/18 05:51	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 18:05	08/27/18 05:51	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 18:05	08/27/18 05:51	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 18:05	08/27/18 05:51	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 18:05	08/27/18 05:51	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 18:05	08/27/18 05:51	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 05:51	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 05:51	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 18:05	08/27/18 05:51	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 18:05	08/27/18 05:51	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/26/18 18:05	08/27/18 05:51	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 18:05	08/27/18 05:51	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 05:51	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 05:51	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 05:51	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 05:51	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 05:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 18:05*	*08/27/18 05:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*89*		*30 - 130*	*08/26/18 18:05*	*08/27/18 05:51*	*1*
Phenol-d5 (Surr)	*24*		*15 - 110*	*08/26/18 18:05*	*08/27/18 05:51*	*1*
Terphenyl-d14 (Surr)	*94*		*30 - 130*	*08/26/18 18:05*	*08/27/18 05:51*	*1*
2,4,6-Tribromophenol (Surr)	*88*		*15 - 110*	*08/26/18 18:05*	*08/27/18 05:51*	*1*
2-Fluorophenol (Surr)	*37*		*15 - 110*	*08/26/18 18:05*	*08/27/18 05:51*	*1*
2-Fluorobiphenyl	*85*		*30 - 130*	*08/26/18 18:05*	*08/27/18 05:51*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:42	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:42	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:42	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:42	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:42	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:42	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 19:42	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 19:42	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 19:42	1

Client Sample ID: Dup-02-082318

Date Collected: 08/23/18 12:00
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-12

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*69*		*30 - 150*	*08/28/18 09:19*	*08/29/18 19:42*	*1*
Tetrachloro-m-xylene	*70*		*30 - 150*	*08/28/18 09:19*	*08/29/18 19:42*	*1*
DCB Decachlorobiphenyl	*74*		*30 - 150*	*08/28/18 09:19*	*08/29/18 19:42*	*1*
DCB Decachlorobiphenyl	*73*		*30 - 150*	*08/28/18 09:19*	*08/29/18 19:42*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.11**		0.12	0.078	mg/L			08/26/18 20:05	1
Sulfate	**10.7**		0.60	0.33	mg/L			08/26/18 20:05	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/01/18 04:28	09/05/18 03:59	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/01/18 04:28	09/05/18 03:59	2
Barium	**2.3**	**J**	4.0	1.1	ug/L		09/01/18 04:28	09/05/18 03:59	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:40	08/31/18 15:09	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/01/18 04:28	09/05/18 03:59	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 03:59	2
Chromium	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 03:59	2
Copper	**9.4**		4.0	1.9	ug/L		09/01/18 04:28	09/05/18 03:59	2
Manganese	2.7	U	8.0	2.7	ug/L		09/01/18 04:28	09/05/18 03:59	2
Nickel	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 03:59	2
Lead	0.37	U	1.2	0.37	ug/L		09/01/18 04:28	09/05/18 03:59	2
Antimony	0.62	U	2.0	0.62	ug/L		09/01/18 04:28	09/05/18 03:59	2
Selenium	0.69	U	10.0	0.69	ug/L		09/01/18 04:28	09/05/18 03:59	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/01/18 04:28	09/05/18 03:59	2
Zinc	5.4	U	16.0	5.4	ug/L		09/01/18 04:28	09/05/18 03:59	2
Aluminum	**17.7**	**J**	40.0	15.0	ug/L		09/01/18 04:28	09/05/18 03:59	2
Sodium	**2780**		200	75.7	ug/L		09/01/18 04:28	09/05/18 03:59	2
Magnesium	**2680**		200	65.7	ug/L		09/01/18 04:28	09/05/18 03:59	2
Potassium	**583**		200	64.9	ug/L		09/01/18 04:28	09/05/18 03:59	2
Calcium	**6590**		200	67.6	ug/L		09/01/18 04:28	09/05/18 03:59	2
Iron	45.7	U	120	45.7	ug/L		09/01/18 04:28	09/05/18 03:59	2
Thallium	0.24	U	0.80	0.24	ug/L		09/01/18 04:28	09/05/18 03:59	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 04:17	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 04:17	2
Barium	**1.5**	**J**	4.0	1.1	ug/L		08/30/18 01:59	08/30/18 04:17	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 04:17	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 04:17	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 15:38	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 04:17	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 15:38	2
Manganese	2.7	U	8.0	2.7	ug/L		08/30/18 01:59	08/30/18 04:17	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 15:38	2

Client Sample ID: Dup-02-082318

Lab Sample ID: 460-163302-12

Date Collected: 08/23/18 12:00

Matrix: Water

Date Received: 08/24/18 17:10

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 04:17	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 04:17	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 04:17	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 04:17	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 01:59	08/30/18 04:17	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 04:17	2
Sodium	**1950**		200	75.7	ug/L		08/30/18 01:59	08/30/18 04:17	2
Magnesium	**2060**		200	65.7	ug/L		08/30/18 01:59	08/30/18 04:17	2
Potassium	**499**		200	64.9	ug/L		08/30/18 01:59	08/30/18 04:17	2
Calcium	**5740**		200	67.6	ug/L		08/30/18 01:59	08/30/18 04:17	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 01:59	08/30/18 04:17	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 04:17	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 14:18	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 11:03	1
Bicarbonate Alkalinity as CaCO3	**21.6**		5.0	5.0	mg/L			08/26/18 12:13	1
Alkalinity	**21.6**		5.0	5.0	mg/L			08/26/18 12:13	1

Client Sample ID: OB-12-082318

Lab Sample ID: 460-163302-13

Date Collected: 08/23/18 11:50

Matrix: Water

Date Received: 08/24/18 17:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/30/18 17:09	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/30/18 17:09	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/30/18 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*08/30/18 17:09*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 02:40	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 02:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 02:40	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 02:40	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 02:40	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 02:40	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 02:40	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 02:40	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 02:40	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-12-082318
Date Collected: 08/23/18 11:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 02:40	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 02:40	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/29/18 02:40	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/29/18 02:40	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 02:40	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 02:40	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 02:40	1
Acetone	5.0	U	5.0	5.0	ug/L			08/29/18 02:40	1
Benzene	0.43	U	1.0	0.43	ug/L			08/29/18 02:40	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 02:40	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 02:40	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/29/18 02:40	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 02:40	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/29/18 02:40	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 02:40	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 02:40	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/29/18 02:40	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 02:40	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 02:40	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 02:40	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 02:40	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/29/18 02:40	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 02:40	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 02:40	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 02:40	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/29/18 02:40	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 02:40	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 02:40	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/29/18 02:40	1
Methylene Chloride	**0.37**	**J**	1.0	0.32	ug/L			08/29/18 02:40	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 02:40	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 02:40	1
Toluene	0.38	U	1.0	0.38	ug/L			08/29/18 02:40	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 02:40	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 02:40	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 02:40	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 02:40	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 02:40	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 02:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/18 02:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/29/18 02:40*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*08/29/18 02:40*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/29/18 02:40*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/29/18 02:40*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-12-082318
Date Collected: 08/23/18 11:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-13
Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.28		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 06:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*08/27/18 08:04*	*08/28/18 06:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/26/18 18:05	08/27/18 18:14	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/26/18 18:05	08/27/18 18:14	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 18:05	08/27/18 18:14	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/26/18 18:05	08/27/18 18:14	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 18:05	08/27/18 18:14	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 18:05	08/27/18 18:14	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 18:05	08/27/18 18:14	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 18:05	08/27/18 18:14	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 18:05	08/27/18 18:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 18:05	08/27/18 06:12	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 18:05	08/27/18 06:12	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/26/18 18:05	08/27/18 06:12	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 06:12	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 06:12	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 06:12	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 18:05	08/27/18 06:12	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 06:12	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 18:05	08/27/18 06:12	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 18:05	08/27/18 06:12	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 18:05	08/27/18 06:12	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 18:05	08/27/18 06:12	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 18:05	08/27/18 06:12	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 18:05	08/27/18 06:12	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 18:05	08/27/18 06:12	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 18:05	08/27/18 06:12	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 18:05	08/27/18 06:12	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 06:12	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 18:05	08/27/18 06:12	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/26/18 18:05	08/27/18 06:12	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 06:12	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 18:05	08/27/18 06:12	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 06:12	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 18:05	08/27/18 06:12	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 18:05	08/27/18 06:12	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 18:05	08/27/18 06:12	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 18:05	08/27/18 06:12	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 18:05	08/27/18 06:12	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 06:12	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 06:12	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 18:05	08/27/18 06:12	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 18:05	08/27/18 06:12	1

Client Sample ID: OB-12-082318
Date Collected: 08/23/18 11:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 18:05	08/27/18 06:12	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 18:05	08/27/18 06:12	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 18:05	08/27/18 06:12	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 18:05	08/27/18 06:12	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 06:12	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 06:12	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 06:12	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 18:05	08/27/18 06:12	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 06:12	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 06:12	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 18:05	08/27/18 06:12	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 18:05	08/27/18 06:12	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 18:05	08/27/18 06:12	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 18:05	08/27/18 06:12	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 18:05	08/27/18 06:12	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 18:05	08/27/18 06:12	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 06:12	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 06:12	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 18:05	08/27/18 06:12	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 18:05	08/27/18 06:12	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/26/18 18:05	08/27/18 06:12	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 18:05	08/27/18 06:12	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 06:12	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 06:12	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 06:12	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 06:12	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 06:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 18:05*	*08/27/18 06:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*87*		*30 - 130*	*08/26/18 18:05*	*08/27/18 06:12*	*1*
Phenol-d5 (Surr)	*24*		*15 - 110*	*08/26/18 18:05*	*08/27/18 06:12*	*1*
Terphenyl-d14 (Surr)	*94*		*30 - 130*	*08/26/18 18:05*	*08/27/18 06:12*	*1*
2,4,6-Tribromophenol (Surr)	*84*		*15 - 110*	*08/26/18 18:05*	*08/27/18 06:12*	*1*
2-Fluorophenol (Surr)	*37*		*15 - 110*	*08/26/18 18:05*	*08/27/18 06:12*	*1*
2-Fluorobiphenyl	*86*		*30 - 130*	*08/26/18 18:05*	*08/27/18 06:12*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:58	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:58	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:58	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:58	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:58	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 19:58	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 19:58	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 19:58	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 19:58	1

Client Sample ID: OB-12-082318
Date Collected: 08/23/18 11:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-13
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*67*		*30 - 150*	*08/28/18 09:19*	*08/29/18 19:58*	*1*
Tetrachloro-m-xylene	*69*		*30 - 150*	*08/28/18 09:19*	*08/29/18 19:58*	*1*
DCB Decachlorobiphenyl	*69*		*30 - 150*	*08/28/18 09:19*	*08/29/18 19:58*	*1*
DCB Decachlorobiphenyl	*68*		*30 - 150*	*08/28/18 09:19*	*08/29/18 19:58*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.19**		0.12	0.078	mg/L			08/26/18 20:16	1
Sulfate	**10.7**		0.60	0.33	mg/L			08/26/18 20:16	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:40	08/31/18 15:12	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:40	08/31/18 15:12	2
Barium	**2.3**	**J**	4.0	1.1	ug/L		08/30/18 01:40	08/31/18 15:12	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:40	08/31/18 15:12	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:40	08/31/18 15:12	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:40	08/31/18 15:12	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:40	08/31/18 15:12	2
Copper	**4.4**		4.0	1.9	ug/L		08/30/18 01:40	08/31/18 15:12	2
Manganese	2.7	U	8.0	2.7	ug/L		08/30/18 01:40	08/31/18 15:12	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:40	08/31/18 15:12	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:40	08/31/18 15:12	2
Antimony	**0.67**	**J**	2.0	0.62	ug/L		08/30/18 01:40	08/31/18 15:12	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:40	08/31/18 15:12	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:40	08/31/18 15:12	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 01:40	08/31/18 15:12	2
Aluminum	**32.5**	**J**	40.0	15.0	ug/L		08/30/18 01:40	08/31/18 15:12	2
Sodium	**2710**		200	75.7	ug/L		08/30/18 01:40	08/31/18 15:12	2
Magnesium	**2670**		200	65.7	ug/L		08/30/18 01:40	08/31/18 15:12	2
Potassium	**549**		200	64.9	ug/L		08/30/18 01:40	08/31/18 15:12	2
Calcium	**6320**		200	67.6	ug/L		08/30/18 01:40	08/31/18 15:12	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 01:40	08/31/18 15:12	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:40	08/31/18 15:12	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 04:23	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 04:23	2
Barium	**1.6**	**J**	4.0	1.1	ug/L		08/30/18 01:59	08/30/18 04:23	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 04:23	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 04:23	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 15:45	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 04:23	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 15:45	2
Manganese	2.7	U	8.0	2.7	ug/L		08/30/18 01:59	08/30/18 04:23	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 15:45	2

Client Sample ID: OB-12-082318

Lab Sample ID: 460-163302-13

Date Collected: 08/23/18 11:50

Matrix: Water

Date Received: 08/24/18 17:10

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 04:23	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 04:23	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 04:23	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 04:23	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 01:59	08/30/18 04:23	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 04:23	2
Sodium	**1880**		200	75.7	ug/L		08/30/18 01:59	08/30/18 04:23	2
Magnesium	**1990**		200	65.7	ug/L		08/30/18 01:59	08/30/18 04:23	2
Potassium	**472**		200	64.9	ug/L		08/30/18 01:59	08/30/18 04:23	2
Calcium	**5470**		200	67.6	ug/L		08/30/18 01:59	08/30/18 04:23	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 01:59	08/30/18 04:23	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 04:23	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 14:20	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 11:04	1
Bicarbonate Alkalinity as CaCO3	**21.9**		5.0	5.0	mg/L			08/26/18 12:21	1
Alkalinity	**21.9**		5.0	5.0	mg/L			08/26/18 12:21	1

Client Sample ID: OB-2-082318

Lab Sample ID: 460-163302-14

Date Collected: 08/23/18 14:20

Matrix: Water

Date Received: 08/24/18 17:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/30/18 17:32	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/30/18 17:32	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/30/18 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*70 - 130*		*08/30/18 17:32*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 03:03	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 03:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 03:03	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 03:03	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 03:03	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 03:03	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 03:03	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 03:03	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 03:03	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-2-082318
Date Collected: 08/23/18 14:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 03:03	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 03:03	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/29/18 03:03	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/29/18 03:03	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 03:03	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 03:03	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 03:03	1
Acetone	5.0	U	5.0	5.0	ug/L			08/29/18 03:03	1
Benzene	0.43	U	1.0	0.43	ug/L			08/29/18 03:03	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 03:03	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 03:03	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/29/18 03:03	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 03:03	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/29/18 03:03	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 03:03	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 03:03	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/29/18 03:03	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 03:03	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 03:03	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 03:03	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 03:03	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/29/18 03:03	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 03:03	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 03:03	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 03:03	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/29/18 03:03	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 03:03	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 03:03	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/29/18 03:03	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/29/18 03:03	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 03:03	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 03:03	1
Toluene	0.38	U	1.0	0.38	ug/L			08/29/18 03:03	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 03:03	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 03:03	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 03:03	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 03:03	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 03:03	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 03:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/18 03:03*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*08/29/18 03:03*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*08/29/18 03:03*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/29/18 03:03*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/29/18 03:03*	*1*

Client Sample ID: OB-2-082318
Date Collected: 08/23/18 14:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-14
Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.25		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 06:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*10 - 150*	*08/27/18 08:04*	*08/28/18 06:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/26/18 18:05	08/27/18 18:36	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/26/18 18:05	08/27/18 18:36	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 18:05	08/27/18 18:36	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/26/18 18:05	08/27/18 18:36	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 18:05	08/27/18 18:36	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 18:05	08/27/18 18:36	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 18:05	08/27/18 18:36	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 18:05	08/27/18 18:36	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 18:05	08/27/18 18:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 18:05	08/27/18 06:33	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 18:05	08/27/18 06:33	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/26/18 18:05	08/27/18 06:33	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 06:33	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 06:33	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 06:33	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 18:05	08/27/18 06:33	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 06:33	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 18:05	08/27/18 06:33	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 18:05	08/27/18 06:33	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 18:05	08/27/18 06:33	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 18:05	08/27/18 06:33	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 18:05	08/27/18 06:33	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 18:05	08/27/18 06:33	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 18:05	08/27/18 06:33	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 18:05	08/27/18 06:33	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 18:05	08/27/18 06:33	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 06:33	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 18:05	08/27/18 06:33	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/26/18 18:05	08/27/18 06:33	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 06:33	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 18:05	08/27/18 06:33	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 06:33	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 18:05	08/27/18 06:33	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 18:05	08/27/18 06:33	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 18:05	08/27/18 06:33	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 18:05	08/27/18 06:33	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 18:05	08/27/18 06:33	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 06:33	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 06:33	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 18:05	08/27/18 06:33	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 18:05	08/27/18 06:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-2-082318
Date Collected: 08/23/18 14:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 18:05	08/27/18 06:33	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 18:05	08/27/18 06:33	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 18:05	08/27/18 06:33	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 18:05	08/27/18 06:33	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 06:33	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 06:33	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 06:33	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 18:05	08/27/18 06:33	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 06:33	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 06:33	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 18:05	08/27/18 06:33	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 18:05	08/27/18 06:33	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 18:05	08/27/18 06:33	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 18:05	08/27/18 06:33	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 18:05	08/27/18 06:33	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 18:05	08/27/18 06:33	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 06:33	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 06:33	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 18:05	08/27/18 06:33	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 18:05	08/27/18 06:33	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/26/18 18:05	08/27/18 06:33	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 18:05	08/27/18 06:33	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 06:33	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 06:33	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 06:33	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 06:33	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 06:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 18:05*	*08/27/18 06:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*84*		*30 - 130*	*08/26/18 18:05*	*08/27/18 06:33*	*1*
Phenol-d5 (Surr)	*24*		*15 - 110*	*08/26/18 18:05*	*08/27/18 06:33*	*1*
Terphenyl-d14 (Surr)	*90*		*30 - 130*	*08/26/18 18:05*	*08/27/18 06:33*	*1*
2,4,6-Tribromophenol (Surr)	*85*		*15 - 110*	*08/26/18 18:05*	*08/27/18 06:33*	*1*
2-Fluorophenol (Surr)	*37*		*15 - 110*	*08/26/18 18:05*	*08/27/18 06:33*	*1*
2-Fluorobiphenyl	*81*		*30 - 130*	*08/26/18 18:05*	*08/27/18 06:33*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:14	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:14	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:14	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:14	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:14	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:14	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 20:14	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 20:14	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 20:14	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-2-082318
Date Collected: 08/23/18 14:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-14
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*30 - 150*	*08/28/18 09:19*	*08/29/18 20:14*	*1*
Tetrachloro-m-xylene	*77*		*30 - 150*	*08/28/18 09:19*	*08/29/18 20:14*	*1*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*08/28/18 09:19*	*08/29/18 20:14*	*1*
DCB Decachlorobiphenyl	*80*		*30 - 150*	*08/28/18 09:19*	*08/29/18 20:14*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.72**		0.12	0.078	mg/L			08/26/18 20:50	1
Sulfate	**11.3**		0.60	0.33	mg/L			08/26/18 20:50	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/01/18 04:28	09/05/18 04:02	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/01/18 04:28	09/05/18 04:02	2
Barium	**5.1**		4.0	1.1	ug/L		09/01/18 04:28	09/05/18 04:02	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:40	08/31/18 15:15	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/01/18 04:28	09/05/18 04:02	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:02	2
Chromium	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:02	2
Copper	**7.4**		4.0	1.9	ug/L		09/01/18 04:28	09/05/18 04:02	2
Manganese	**8.3**		8.0	2.7	ug/L		09/01/18 04:28	09/05/18 04:02	2
Nickel	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:02	2
Lead	0.37	U	1.2	0.37	ug/L		09/01/18 04:28	09/05/18 04:02	2
Antimony	**0.63**	**J**	2.0	0.62	ug/L		09/01/18 04:28	09/05/18 04:02	2
Selenium	0.69	U	10.0	0.69	ug/L		09/01/18 04:28	09/05/18 04:02	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/01/18 04:28	09/05/18 04:02	2
Zinc	5.4	U	16.0	5.4	ug/L		09/01/18 04:28	09/05/18 04:02	2
Aluminum	**80.6**		40.0	15.0	ug/L		09/01/18 04:28	09/05/18 04:02	2
Sodium	**3840**		200	75.7	ug/L		09/01/18 04:28	09/05/18 04:02	2
Magnesium	**4550**		200	65.7	ug/L		09/01/18 04:28	09/05/18 04:02	2
Potassium	**1320**		200	64.9	ug/L		09/01/18 04:28	09/05/18 04:02	2
Calcium	**11600**		200	67.6	ug/L		09/01/18 04:28	09/05/18 04:02	2
Iron	**231**		120	45.7	ug/L		09/01/18 04:28	09/05/18 04:02	2
Thallium	0.24	U	0.80	0.24	ug/L		09/01/18 04:28	09/05/18 04:02	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 04:37	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 04:37	2
Barium	**4.4**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 04:37	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 04:37	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 04:37	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 16:23	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 04:37	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 23:28	2
Manganese	2.7	U	8.0	2.7	ug/L		08/30/18 01:59	08/30/18 04:37	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 16:23	2

Client Sample ID: OB-2-082318

Lab Sample ID: 460-163302-14

Date Collected: 08/23/18 14:20

Matrix: Water

Date Received: 08/24/18 17:10

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 04:37	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 04:37	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 04:37	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 04:37	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 01:59	08/30/18 04:37	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 04:37	2
Sodium	**2740**		200	75.7	ug/L		08/30/18 01:59	08/30/18 04:37	2
Magnesium	**3500**		200	65.7	ug/L		08/30/18 01:59	08/30/18 04:37	2
Potassium	**1180**		200	64.9	ug/L		08/30/18 01:59	08/30/18 04:37	2
Calcium	**10500**		200	67.6	ug/L		08/30/18 01:59	08/30/18 04:37	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 01:59	08/30/18 04:37	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 04:37	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 14:22	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 11:05	1
Bicarbonate Alkalinity as CaCO3	**37.8**		5.0	5.0	mg/L			08/26/18 12:29	1
Alkalinity	**37.8**		5.0	5.0	mg/L			08/26/18 12:29	1

Client Sample ID: TB-03-082418

Lab Sample ID: 460-163302-15

Date Collected: 08/24/18 00:00

Matrix: Water

Date Received: 08/24/18 17:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/30/18 10:54	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/30/18 10:54	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/30/18 10:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*124*		*70 - 130*		*08/30/18 10:54*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/28/18 20:25	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/28/18 20:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/28/18 20:25	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/28/18 20:25	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/28/18 20:25	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/28/18 20:25	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/28/18 20:25	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/28/18 20:25	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/28/18 20:25	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: TB-03-082418
Date Collected: 08/24/18 00:00
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/28/18 20:25	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/28/18 20:25	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/28/18 20:25	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/28/18 20:25	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/28/18 20:25	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/28/18 20:25	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/28/18 20:25	1
Acetone	5.0	U	5.0	5.0	ug/L			08/28/18 20:25	1
Benzene	0.43	U	1.0	0.43	ug/L			08/28/18 20:25	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/28/18 20:25	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/28/18 20:25	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/28/18 20:25	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/28/18 20:25	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/28/18 20:25	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/28/18 20:25	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/28/18 20:25	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/28/18 20:25	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/28/18 20:25	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/28/18 20:25	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/28/18 20:25	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/28/18 20:25	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/28/18 20:25	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/28/18 20:25	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/28/18 20:25	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/28/18 20:25	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/28/18 20:25	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/28/18 20:25	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/28/18 20:25	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/28/18 20:25	1
Methylene Chloride	**0.36**	**J**	1.0	0.32	ug/L			08/28/18 20:25	1
Styrene	0.42	U	1.0	0.42	ug/L			08/28/18 20:25	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/28/18 20:25	1
Toluene	0.38	U	1.0	0.38	ug/L			08/28/18 20:25	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/28/18 20:25	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/28/18 20:25	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/28/18 20:25	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/28/18 20:25	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/28/18 20:25	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/28/18 20:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/28/18 20:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*08/28/18 20:25*	*1*
4-Bromofluorobenzene	*100*		*70 - 130*		*08/28/18 20:25*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/28/18 20:25*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/28/18 20:25*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: RW-13 (71-91)-082418
Date Collected: 08/24/18 10:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/30/18 17:55	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/30/18 17:55	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/30/18 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*120*		*70 - 130*		*08/30/18 17:55*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 03:26	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 03:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 03:26	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 03:26	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 03:26	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 03:26	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 03:26	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 03:26	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 03:26	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 03:26	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 03:26	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/29/18 03:26	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/29/18 03:26	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 03:26	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 03:26	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 03:26	1
Acetone	5.0	U	5.0	5.0	ug/L			08/29/18 03:26	1
Benzene	0.43	U	1.0	0.43	ug/L			08/29/18 03:26	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 03:26	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 03:26	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/29/18 03:26	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 03:26	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/29/18 03:26	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 03:26	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 03:26	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/29/18 03:26	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 03:26	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 03:26	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 03:26	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 03:26	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/29/18 03:26	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 03:26	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 03:26	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 03:26	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/29/18 03:26	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 03:26	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 03:26	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/29/18 03:26	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/29/18 03:26	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 03:26	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 03:26	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: RW-13 (71-91)-082418
Date Collected: 08/24/18 10:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/29/18 03:26	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 03:26	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 03:26	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 03:26	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 03:26	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 03:26	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 03:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/18 03:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*08/29/18 03:26*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*08/29/18 03:26*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*08/29/18 03:26*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/29/18 03:26*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.50**		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 06:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/27/18 08:04*	*08/28/18 06:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/26/18 18:05	08/27/18 18:57	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/26/18 18:05	08/27/18 18:57	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 18:05	08/27/18 18:57	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/26/18 18:05	08/27/18 18:57	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 18:05	08/27/18 18:57	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 18:05	08/27/18 18:57	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 18:05	08/27/18 18:57	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 18:05	08/27/18 18:57	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 18:05	08/27/18 18:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 18:05	08/27/18 06:54	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 18:05	08/27/18 06:54	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/26/18 18:05	08/27/18 06:54	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 06:54	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 06:54	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 06:54	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 18:05	08/27/18 06:54	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 06:54	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 18:05	08/27/18 06:54	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 18:05	08/27/18 06:54	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 18:05	08/27/18 06:54	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 18:05	08/27/18 06:54	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 18:05	08/27/18 06:54	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: RW-13 (71-91)-082418
Date Collected: 08/24/18 10:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 18:05	08/27/18 06:54	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 18:05	08/27/18 06:54	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 18:05	08/27/18 06:54	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 18:05	08/27/18 06:54	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 06:54	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 18:05	08/27/18 06:54	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/26/18 18:05	08/27/18 06:54	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 06:54	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 18:05	08/27/18 06:54	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 06:54	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 18:05	08/27/18 06:54	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 18:05	08/27/18 06:54	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 18:05	08/27/18 06:54	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 18:05	08/27/18 06:54	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 18:05	08/27/18 06:54	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 06:54	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 06:54	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 18:05	08/27/18 06:54	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 18:05	08/27/18 06:54	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 18:05	08/27/18 06:54	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 18:05	08/27/18 06:54	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 18:05	08/27/18 06:54	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 18:05	08/27/18 06:54	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 06:54	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 06:54	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 06:54	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 18:05	08/27/18 06:54	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 06:54	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 06:54	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 18:05	08/27/18 06:54	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 18:05	08/27/18 06:54	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 18:05	08/27/18 06:54	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 18:05	08/27/18 06:54	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 18:05	08/27/18 06:54	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 18:05	08/27/18 06:54	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 06:54	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 06:54	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 18:05	08/27/18 06:54	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 18:05	08/27/18 06:54	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/26/18 18:05	08/27/18 06:54	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 18:05	08/27/18 06:54	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 06:54	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 06:54	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 06:54	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 06:54	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 06:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 18:05*	*08/27/18 06:54*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: RW-13 (71-91)-082418
Date Collected: 08/24/18 10:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-16
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	87		30 - 130	08/26/18 18:05	08/27/18 06:54	1
Phenol-d5 (Surr)	24		15 - 110	08/26/18 18:05	08/27/18 06:54	1
Terphenyl-d14 (Surr)	95		30 - 130	08/26/18 18:05	08/27/18 06:54	1
2,4,6-Tribromophenol (Surr)	90		15 - 110	08/26/18 18:05	08/27/18 06:54	1
2-Fluorophenol (Surr)	37		15 - 110	08/26/18 18:05	08/27/18 06:54	1
2-Fluorobiphenyl	82		30 - 130	08/26/18 18:05	08/27/18 06:54	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:30	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:30	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:30	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:30	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:30	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:30	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 20:30	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 20:30	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 20:30	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 20:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		30 - 150	08/28/18 09:19	08/29/18 20:30	1
Tetrachloro-m-xylene	75		30 - 150	08/28/18 09:19	08/29/18 20:30	1
DCB Decachlorobiphenyl	95		30 - 150	08/28/18 09:19	08/29/18 20:30	1
DCB Decachlorobiphenyl	93		30 - 150	08/28/18 09:19	08/29/18 20:30	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**19.3**		0.60	0.33	mg/L			08/26/18 21:02	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40.6**	**D**	2.40	1.56	mg/L			08/28/18 00:28	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/01/18 04:28	09/05/18 04:04	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/01/18 04:28	09/05/18 04:04	2
Barium	**13.5**		4.0	1.1	ug/L		09/01/18 04:28	09/05/18 04:04	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:40	08/31/18 15:28	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/01/18 04:28	09/05/18 04:04	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:04	2
Chromium	**1.5**	**J**	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:04	2
Copper	**4.4**		4.0	1.9	ug/L		09/01/18 04:28	09/05/18 04:04	2
Manganese	**16.0**		8.0	2.7	ug/L		09/01/18 04:28	09/05/18 04:04	2
Nickel	**1.4**	**J**	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:04	2
Lead	0.37	U	1.2	0.37	ug/L		09/01/18 04:28	09/05/18 04:04	2
Antimony	**0.62**	**J**	2.0	0.62	ug/L		09/01/18 04:28	09/05/18 04:04	2
Selenium	0.69	U	10.0	0.69	ug/L		09/01/18 04:28	09/05/18 04:04	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/01/18 04:28	09/05/18 04:04	2
Zinc	5.4	U	16.0	5.4	ug/L		09/01/18 04:28	09/05/18 04:04	2

Client Sample ID: RW-13 (71-91)-082418
Date Collected: 08/24/18 10:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-16
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**94.0**		40.0	15.0	ug/L		09/01/18 04:28	09/05/18 04:04	2
Sodium	**17000**		200	75.7	ug/L		09/01/18 04:28	09/05/18 04:04	2
Magnesium	**17000**		200	65.7	ug/L		09/01/18 04:28	09/05/18 04:04	2
Potassium	**3270**		200	64.9	ug/L		09/01/18 04:28	09/05/18 04:04	2
Calcium	**44600**		200	67.6	ug/L		09/01/18 04:28	09/05/18 04:04	2
Iron	**209**		120	45.7	ug/L		09/01/18 04:28	09/05/18 04:04	2
Thallium	0.24	U	0.80	0.24	ug/L		09/01/18 04:28	09/05/18 04:04	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 04:41	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 04:41	2
Barium	**11.1**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 04:41	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 04:41	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 04:41	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 16:30	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 04:41	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 23:35	2
Manganese	**10**		8.0	2.7	ug/L		08/30/18 01:59	08/30/18 04:41	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 16:30	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 04:41	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 04:41	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 04:41	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 04:41	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 01:59	08/30/18 04:41	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 04:41	2
Sodium	**12900**		200	75.7	ug/L		08/30/18 01:59	08/30/18 04:41	2
Magnesium	**13300**		200	65.7	ug/L		08/30/18 01:59	08/30/18 04:41	2
Potassium	**2800**		200	64.9	ug/L		08/30/18 01:59	08/30/18 04:41	2
Calcium	**39300**		200	67.6	ug/L		08/30/18 01:59	08/30/18 04:41	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 01:59	08/30/18 04:41	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 04:41	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 14:24	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 11:05	1
Bicarbonate Alkalinity as CaCO3	**129**		5.0	5.0	mg/L			08/26/18 12:36	1
Alkalinity	**129**		5.0	5.0	mg/L			08/26/18 12:36	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-30A-082418
Date Collected: 08/24/18 12:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/30/18 18:19	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/30/18 18:19	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/30/18 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*70 - 130*		*08/30/18 18:19*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 03:50	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 03:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 03:50	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 03:50	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 03:50	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 03:50	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 03:50	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 03:50	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 03:50	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 03:50	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 03:50	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/29/18 03:50	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/29/18 03:50	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 03:50	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 03:50	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 03:50	1
Acetone	5.0	U	5.0	5.0	ug/L			08/29/18 03:50	1
Benzene	0.43	U	1.0	0.43	ug/L			08/29/18 03:50	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 03:50	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 03:50	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/29/18 03:50	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 03:50	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/29/18 03:50	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 03:50	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 03:50	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/29/18 03:50	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 03:50	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 03:50	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 03:50	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 03:50	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/29/18 03:50	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 03:50	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 03:50	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 03:50	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/29/18 03:50	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 03:50	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 03:50	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/29/18 03:50	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/29/18 03:50	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 03:50	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 03:50	1

Client Sample ID: OB-30A-082418
Date Collected: 08/24/18 12:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/29/18 03:50	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 03:50	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 03:50	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 03:50	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 03:50	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 03:50	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 03:50	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/18 03:50*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*08/29/18 03:50*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*08/29/18 03:50*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/29/18 03:50*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/29/18 03:50*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.34**		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 07:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*10 - 150*	*08/27/18 08:04*	*08/28/18 07:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/26/18 18:05	08/27/18 19:18	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/26/18 18:05	08/27/18 19:18	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 18:05	08/27/18 19:18	1
Bis(2-chloroethyl)ether	**0.031**		0.030	0.026	ug/L		08/26/18 18:05	08/27/18 19:18	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 18:05	08/27/18 19:18	1
Hexachlorobenzene	**0.027**	*	0.020	0.013	ug/L		08/26/18 18:05	08/27/18 19:18	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 18:05	08/27/18 19:18	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 18:05	08/27/18 19:18	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 18:05	08/27/18 19:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 18:05	08/27/18 07:15	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 18:05	08/27/18 07:15	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/26/18 18:05	08/27/18 07:15	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 07:15	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 07:15	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 07:15	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 18:05	08/27/18 07:15	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 07:15	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 18:05	08/27/18 07:15	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 18:05	08/27/18 07:15	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 18:05	08/27/18 07:15	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 18:05	08/27/18 07:15	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 18:05	08/27/18 07:15	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-30A-082418
Date Collected: 08/24/18 12:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 18:05	08/27/18 07:15	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 18:05	08/27/18 07:15	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 18:05	08/27/18 07:15	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 18:05	08/27/18 07:15	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 07:15	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 18:05	08/27/18 07:15	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/26/18 18:05	08/27/18 07:15	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 07:15	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 18:05	08/27/18 07:15	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 07:15	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 18:05	08/27/18 07:15	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 18:05	08/27/18 07:15	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 18:05	08/27/18 07:15	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 18:05	08/27/18 07:15	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 18:05	08/27/18 07:15	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 07:15	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 07:15	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 18:05	08/27/18 07:15	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 18:05	08/27/18 07:15	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 18:05	08/27/18 07:15	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 18:05	08/27/18 07:15	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 18:05	08/27/18 07:15	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 18:05	08/27/18 07:15	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 07:15	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 07:15	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 07:15	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 18:05	08/27/18 07:15	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 07:15	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 07:15	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 18:05	08/27/18 07:15	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 18:05	08/27/18 07:15	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 18:05	08/27/18 07:15	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 18:05	08/27/18 07:15	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 18:05	08/27/18 07:15	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 18:05	08/27/18 07:15	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 07:15	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 07:15	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 18:05	08/27/18 07:15	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 18:05	08/27/18 07:15	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/26/18 18:05	08/27/18 07:15	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 18:05	08/27/18 07:15	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 07:15	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 07:15	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 07:15	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 07:15	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 07:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 18:05*	*08/27/18 07:15*	*1*

Client Sample ID: OB-30A-082418
Date Collected: 08/24/18 12:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-17
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*77*		*30 - 130*	*08/26/18 18:05*	*08/27/18 07:15*	*1*
Phenol-d5 (Surr)	*21*		*15 - 110*	*08/26/18 18:05*	*08/27/18 07:15*	*1*
Terphenyl-d14 (Surr)	*85*		*30 - 130*	*08/26/18 18:05*	*08/27/18 07:15*	*1*
2,4,6-Tribromophenol (Surr)	*80*		*15 - 110*	*08/26/18 18:05*	*08/27/18 07:15*	*1*
2-Fluorophenol (Surr)	*32*		*15 - 110*	*08/26/18 18:05*	*08/27/18 07:15*	*1*
2-Fluorobiphenyl	*74*		*30 - 130*	*08/26/18 18:05*	*08/27/18 07:15*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:46	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:46	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:46	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:46	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:46	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 20:46	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 20:46	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 20:46	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 20:46	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 20:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*55*		*30 - 150*	*08/28/18 09:19*	*08/29/18 20:46*	*1*
Tetrachloro-m-xylene	*54*		*30 - 150*	*08/28/18 09:19*	*08/29/18 20:46*	*1*
DCB Decachlorobiphenyl	*74*		*30 - 150*	*08/28/18 09:19*	*08/29/18 20:46*	*1*
DCB Decachlorobiphenyl	*69*		*30 - 150*	*08/28/18 09:19*	*08/29/18 20:46*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**12.8**		0.60	0.33	mg/L			08/26/18 21:13	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.6**	**D**	1.20	0.78	mg/L			08/28/18 00:41	10

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/01/18 04:28	09/05/18 04:07	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/01/18 04:28	09/05/18 04:07	2
Barium	**31.7**		4.0	1.1	ug/L		09/01/18 04:28	09/05/18 04:07	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:40	08/31/18 15:31	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/01/18 04:28	09/05/18 04:07	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:07	2
Chromium	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:07	2
Copper	**6.5**		4.0	1.9	ug/L		09/01/18 04:28	09/05/18 04:07	2
Manganese	**6.5**	**J**	8.0	2.7	ug/L		09/01/18 04:28	09/05/18 04:07	2
Nickel	**2.0**	**J**	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:07	2
Lead	0.37	U	1.2	0.37	ug/L		09/01/18 04:28	09/05/18 04:07	2
Antimony	**1.3**	**J**	2.0	0.62	ug/L		09/01/18 04:28	09/05/18 04:07	2
Selenium	0.69	U	10.0	0.69	ug/L		09/01/18 04:28	09/05/18 04:07	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/01/18 04:28	09/05/18 04:07	2
Zinc	5.4	U	16.0	5.4	ug/L		09/01/18 04:28	09/05/18 04:07	2

Client Sample ID: OB-30A-082418
Date Collected: 08/24/18 12:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-17
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**52.2**		40.0	15.0	ug/L		09/01/18 04:28	09/05/18 04:07	2
Sodium	**26100**		200	75.7	ug/L		09/01/18 04:28	09/05/18 04:07	2
Magnesium	**4730**		200	65.7	ug/L		09/01/18 04:28	09/05/18 04:07	2
Potassium	**3440**		200	64.9	ug/L		09/01/18 04:28	09/05/18 04:07	2
Calcium	**20600**		200	67.6	ug/L		09/01/18 04:28	09/05/18 04:07	2
Iron	**694**		120	45.7	ug/L		09/01/18 04:28	09/05/18 04:07	2
Thallium	0.24	U	0.80	0.24	ug/L		09/01/18 04:28	09/05/18 04:07	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 04:44	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 04:44	2
Barium	**24.2**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 04:44	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 04:44	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 04:44	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 16:37	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 04:44	2
Copper	**2.5**	**J**	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 23:42	2
Manganese	2.7	U	8.0	2.7	ug/L		08/30/18 01:59	08/30/18 04:44	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 16:37	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 04:44	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 04:44	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 04:44	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 04:44	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 01:59	08/30/18 04:44	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 04:44	2
Sodium	**18700**		200	75.7	ug/L		08/30/18 01:59	08/30/18 04:44	2
Magnesium	**3490**		200	65.7	ug/L		08/30/18 01:59	08/30/18 04:44	2
Potassium	**2870**		200	64.9	ug/L		08/30/18 01:59	08/30/18 04:44	2
Calcium	**17300**		200	67.6	ug/L		08/30/18 01:59	08/30/18 04:44	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 01:59	08/30/18 04:44	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 04:44	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 14:25	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 11:06	1
Bicarbonate Alkalinity as CaCO3	**77.5**		5.0	5.0	mg/L			08/26/18 12:43	1
Alkalinity	**77.5**		5.0	5.0	mg/L			08/26/18 12:43	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: Dup-03-082418
Date Collected: 08/24/18 12:00
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/31/18 11:08	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/31/18 11:08	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/31/18 11:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 130*		*08/31/18 11:08*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 04:13	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 04:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 04:13	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 04:13	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 04:13	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 04:13	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 04:13	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 04:13	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 04:13	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 04:13	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 04:13	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/29/18 04:13	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/29/18 04:13	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 04:13	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 04:13	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 04:13	1
Acetone	5.0	U	5.0	5.0	ug/L			08/29/18 04:13	1
Benzene	0.43	U	1.0	0.43	ug/L			08/29/18 04:13	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 04:13	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 04:13	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/29/18 04:13	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 04:13	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/29/18 04:13	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 04:13	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 04:13	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/29/18 04:13	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 04:13	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 04:13	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 04:13	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 04:13	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/29/18 04:13	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 04:13	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 04:13	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 04:13	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/29/18 04:13	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 04:13	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 04:13	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/29/18 04:13	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/29/18 04:13	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 04:13	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 04:13	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: Dup-03-082418
Date Collected: 08/24/18 12:00
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/29/18 04:13	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 04:13	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 04:13	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 04:13	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 04:13	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 04:13	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 04:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/18 04:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*08/29/18 04:13*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*08/29/18 04:13*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/29/18 04:13*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/29/18 04:13*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.45**		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 07:18	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*34*		*10 - 150*	*08/27/18 08:04*	*08/28/18 07:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/26/18 18:05	08/27/18 19:39	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/26/18 18:05	08/27/18 19:39	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 18:05	08/27/18 19:39	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/26/18 18:05	08/27/18 19:39	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 18:05	08/27/18 19:39	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 18:05	08/27/18 19:39	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 18:05	08/27/18 19:39	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 18:05	08/27/18 19:39	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 18:05	08/27/18 19:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 18:05	08/27/18 07:36	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 18:05	08/27/18 07:36	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/26/18 18:05	08/27/18 07:36	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 07:36	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 07:36	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 07:36	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 18:05	08/27/18 07:36	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 07:36	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 18:05	08/27/18 07:36	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 18:05	08/27/18 07:36	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 18:05	08/27/18 07:36	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 18:05	08/27/18 07:36	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 18:05	08/27/18 07:36	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: Dup-03-082418
Date Collected: 08/24/18 12:00
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 18:05	08/27/18 07:36	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 18:05	08/27/18 07:36	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 18:05	08/27/18 07:36	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 18:05	08/27/18 07:36	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 07:36	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 18:05	08/27/18 07:36	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/26/18 18:05	08/27/18 07:36	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 07:36	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 18:05	08/27/18 07:36	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 07:36	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 18:05	08/27/18 07:36	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 18:05	08/27/18 07:36	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 18:05	08/27/18 07:36	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 18:05	08/27/18 07:36	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 18:05	08/27/18 07:36	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 07:36	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 07:36	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 18:05	08/27/18 07:36	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 18:05	08/27/18 07:36	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 18:05	08/27/18 07:36	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 18:05	08/27/18 07:36	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 18:05	08/27/18 07:36	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 18:05	08/27/18 07:36	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 07:36	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 07:36	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 07:36	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 18:05	08/27/18 07:36	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 07:36	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 07:36	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 18:05	08/27/18 07:36	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 18:05	08/27/18 07:36	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 18:05	08/27/18 07:36	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 18:05	08/27/18 07:36	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 18:05	08/27/18 07:36	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 18:05	08/27/18 07:36	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 07:36	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 07:36	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 18:05	08/27/18 07:36	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 18:05	08/27/18 07:36	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/26/18 18:05	08/27/18 07:36	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 18:05	08/27/18 07:36	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 07:36	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 07:36	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 07:36	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 07:36	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 07:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 18:05*	*08/27/18 07:36*	*1*

Client Sample ID: Dup-03-082418

Date Collected: 08/24/18 12:00
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-18

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*84*		*30 - 130*	*08/26/18 18:05*	*08/27/18 07:36*	*1*
Phenol-d5 (Surr)	*23*		*15 - 110*	*08/26/18 18:05*	*08/27/18 07:36*	*1*
Terphenyl-d14 (Surr)	*93*		*30 - 130*	*08/26/18 18:05*	*08/27/18 07:36*	*1*
2,4,6-Tribromophenol (Surr)	*85*		*15 - 110*	*08/26/18 18:05*	*08/27/18 07:36*	*1*
2-Fluorophenol (Surr)	*35*		*15 - 110*	*08/26/18 18:05*	*08/27/18 07:36*	*1*
2-Fluorobiphenyl	*80*		*30 - 130*	*08/26/18 18:05*	*08/27/18 07:36*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:02	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:02	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:02	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:02	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:02	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:02	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:02	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:02	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:02	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*63*		*30 - 150*	*08/28/18 09:19*	*08/29/18 21:02*	*1*
Tetrachloro-m-xylene	*76*		*30 - 150*	*08/28/18 09:19*	*08/29/18 21:02*	*1*
DCB Decachlorobiphenyl	*87*		*30 - 150*	*08/28/18 09:19*	*08/29/18 21:02*	*1*
DCB Decachlorobiphenyl	*99*		*30 - 150*	*08/28/18 09:19*	*08/29/18 21:02*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**19.2**		0.60	0.33	mg/L			08/26/18 21:24	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38.5**	**D**	2.40	1.56	mg/L			08/28/18 00:55	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/01/18 04:28	09/05/18 04:12	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/01/18 04:28	09/05/18 04:12	2
Barium	**13.6**		4.0	1.1	ug/L		09/01/18 04:28	09/05/18 04:12	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:40	08/31/18 15:33	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/01/18 04:28	09/05/18 04:12	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:12	2
Chromium	**1.6**	**J**	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:12	2
Copper	**9.9**		4.0	1.9	ug/L		09/01/18 04:28	09/05/18 04:12	2
Manganese	**15.9**		8.0	2.7	ug/L		09/01/18 04:28	09/05/18 04:12	2
Nickel	**1.5**	**J**	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:12	2
Lead	0.37	U	1.2	0.37	ug/L		09/01/18 04:28	09/05/18 04:12	2
Antimony	**0.67**	**J**	2.0	0.62	ug/L		09/01/18 04:28	09/05/18 04:12	2
Selenium	0.69	U	10.0	0.69	ug/L		09/01/18 04:28	09/05/18 04:12	2
Vanadium	**1.3**	**J**	4.0	1.2	ug/L		09/01/18 04:28	09/05/18 04:12	2
Zinc	5.4	U	16.0	5.4	ug/L		09/01/18 04:28	09/05/18 04:12	2

Client Sample ID: Dup-03-082418
Date Collected: 08/24/18 12:00
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-18
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**92.7**		40.0	15.0	ug/L		09/01/18 04:28	09/05/18 04:12	2
Sodium	**16900**		200	75.7	ug/L		09/01/18 04:28	09/05/18 04:12	2
Magnesium	**16900**		200	65.7	ug/L		09/01/18 04:28	09/05/18 04:12	2
Potassium	**3290**		200	64.9	ug/L		09/01/18 04:28	09/05/18 04:12	2
Calcium	**43700**		200	67.6	ug/L		09/01/18 04:28	09/05/18 04:12	2
Iron	**202**		120	45.7	ug/L		09/01/18 04:28	09/05/18 04:12	2
Thallium	0.24	U	0.80	0.24	ug/L		09/01/18 04:28	09/05/18 04:12	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 04:47	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 04:47	2
Barium	**9.6**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 04:47	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 04:47	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 04:47	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 16:44	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 04:47	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 23:49	2
Manganese	**9.5**		8.0	2.7	ug/L		08/30/18 01:59	08/30/18 04:47	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 16:44	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 04:47	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 04:47	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 04:47	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 04:47	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 01:59	08/30/18 04:47	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 04:47	2
Sodium	**12700**		200	75.7	ug/L		08/30/18 01:59	08/30/18 04:47	2
Magnesium	**13200**		200	65.7	ug/L		08/30/18 01:59	08/30/18 04:47	2
Potassium	**2820**		200	64.9	ug/L		08/30/18 01:59	08/30/18 04:47	2
Calcium	**39100**		200	67.6	ug/L		08/30/18 01:59	08/30/18 04:47	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 01:59	08/30/18 04:47	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 04:47	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 14:27	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 11:11	1
Bicarbonate Alkalinity as CaCO3	**129**		5.0	5.0	mg/L			08/26/18 12:51	1
Alkalinity	**129**		5.0	5.0	mg/L			08/26/18 12:51	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: PMS-50-082418
Date Collected: 08/24/18 08:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-19
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/31/18 11:31	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/31/18 11:31	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/31/18 11:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*08/31/18 11:31*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 15:12	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 15:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 15:12	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 15:12	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 15:12	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 15:12	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 15:12	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 15:12	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 15:12	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 15:12	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 15:12	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/29/18 15:12	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/29/18 15:12	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 15:12	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 15:12	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 15:12	1
Acetone	5.0	U	5.0	5.0	ug/L			08/29/18 15:12	1
Benzene	0.43	U	1.0	0.43	ug/L			08/29/18 15:12	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 15:12	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 15:12	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/29/18 15:12	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 15:12	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/29/18 15:12	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 15:12	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 15:12	1
Chloroethane	**0.51**	**J**	1.0	0.32	ug/L			08/29/18 15:12	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 15:12	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 15:12	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 15:12	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 15:12	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/29/18 15:12	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 15:12	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 15:12	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 15:12	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/29/18 15:12	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 15:12	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 15:12	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/29/18 15:12	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/29/18 15:12	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 15:12	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 15:12	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: PMS-50-082418
Date Collected: 08/24/18 08:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-19
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/29/18 15:12	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 15:12	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 15:12	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 15:12	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 15:12	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 15:12	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 15:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/18 15:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*		*08/29/18 15:12*	*1*
4-Bromofluorobenzene	*91*		*70 - 130*		*08/29/18 15:12*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*08/29/18 15:12*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/29/18 15:12*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.41**		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 07:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/27/18 08:04*	*08/28/18 07:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/26/18 18:05	08/27/18 20:01	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/26/18 18:05	08/27/18 20:01	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 18:05	08/27/18 20:01	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/26/18 18:05	08/27/18 20:01	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 18:05	08/27/18 20:01	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 18:05	08/27/18 20:01	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 18:05	08/27/18 20:01	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 18:05	08/27/18 20:01	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 18:05	08/27/18 20:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 18:05	08/27/18 07:57	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 18:05	08/27/18 07:57	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/26/18 18:05	08/27/18 07:57	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 07:57	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 07:57	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 07:57	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 18:05	08/27/18 07:57	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 07:57	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 18:05	08/27/18 07:57	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 18:05	08/27/18 07:57	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 18:05	08/27/18 07:57	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 18:05	08/27/18 07:57	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 18:05	08/27/18 07:57	1

Client Sample ID: PMS-50-082418
Date Collected: 08/24/18 08:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-19
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 18:05	08/27/18 07:57	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 18:05	08/27/18 07:57	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 18:05	08/27/18 07:57	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 18:05	08/27/18 07:57	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 07:57	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 18:05	08/27/18 07:57	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/26/18 18:05	08/27/18 07:57	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 07:57	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 18:05	08/27/18 07:57	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 07:57	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 18:05	08/27/18 07:57	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 18:05	08/27/18 07:57	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 18:05	08/27/18 07:57	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 18:05	08/27/18 07:57	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 18:05	08/27/18 07:57	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 07:57	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 07:57	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 18:05	08/27/18 07:57	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 18:05	08/27/18 07:57	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 18:05	08/27/18 07:57	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 18:05	08/27/18 07:57	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 18:05	08/27/18 07:57	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 18:05	08/27/18 07:57	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 07:57	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 07:57	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 07:57	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 18:05	08/27/18 07:57	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 07:57	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 07:57	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 18:05	08/27/18 07:57	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 18:05	08/27/18 07:57	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 18:05	08/27/18 07:57	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 18:05	08/27/18 07:57	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 18:05	08/27/18 07:57	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 18:05	08/27/18 07:57	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 07:57	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 07:57	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 18:05	08/27/18 07:57	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 18:05	08/27/18 07:57	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/26/18 18:05	08/27/18 07:57	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 18:05	08/27/18 07:57	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 07:57	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 07:57	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 07:57	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 07:57	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 07:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 18:05*	*08/27/18 07:57*	*1*

Client Sample ID: PMS-50-082418
Date Collected: 08/24/18 08:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-19
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	90		30 - 130	08/26/18 18:05	08/27/18 07:57	1
Phenol-d5 (Surr)	22		15 - 110	08/26/18 18:05	08/27/18 07:57	1
Terphenyl-d14 (Surr)	95		30 - 130	08/26/18 18:05	08/27/18 07:57	1
2,4,6-Tribromophenol (Surr)	88		15 - 110	08/26/18 18:05	08/27/18 07:57	1
2-Fluorophenol (Surr)	35		15 - 110	08/26/18 18:05	08/27/18 07:57	1
2-Fluorobiphenyl	87		30 - 130	08/26/18 18:05	08/27/18 07:57	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:18	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:18	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:18	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:18	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:18	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:18	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:18	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:18	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:18	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		30 - 150	08/28/18 09:19	08/29/18 21:18	1
Tetrachloro-m-xylene	75		30 - 150	08/28/18 09:19	08/29/18 21:18	1
DCB Decachlorobiphenyl	50		30 - 150	08/28/18 09:19	08/29/18 21:18	1
DCB Decachlorobiphenyl	48		30 - 150	08/28/18 09:19	08/29/18 21:18	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.71**		0.12	0.078	mg/L			08/26/18 21:36	1
Sulfate	**3.70**		0.60	0.33	mg/L			08/26/18 21:36	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/01/18 04:28	09/05/18 04:18	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/01/18 04:28	09/05/18 04:18	2
Barium	**14.0**		4.0	1.1	ug/L		09/01/18 04:28	09/05/18 04:18	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:40	08/31/18 15:36	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/01/18 04:28	09/05/18 04:18	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:18	2
Chromium	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:18	2
Copper	**4.0**		4.0	1.9	ug/L		09/01/18 04:28	09/05/18 04:18	2
Manganese	**15.3**		8.0	2.7	ug/L		09/01/18 04:28	09/05/18 04:18	2
Nickel	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:18	2
Lead	**1.7**		1.2	0.37	ug/L		09/01/18 04:28	09/05/18 04:18	2
Antimony	**0.63**	**J**	2.0	0.62	ug/L		09/01/18 04:28	09/05/18 04:18	2
Selenium	0.69	U	10.0	0.69	ug/L		09/01/18 04:28	09/05/18 04:18	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/01/18 04:28	09/05/18 04:18	2
Zinc	**1020**		16.0	5.4	ug/L		09/01/18 04:28	09/05/18 04:18	2
Aluminum	**120**		40.0	15.0	ug/L		09/01/18 04:28	09/05/18 04:18	2
Sodium	**2840**		200	75.7	ug/L		09/01/18 04:28	09/05/18 04:18	2
Magnesium	**1640**		200	65.7	ug/L		09/01/18 04:28	09/05/18 04:18	2

Client Sample ID: PMS-50-082418

Date Collected: 08/24/18 08:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-19
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**530**		200	64.9	ug/L		09/01/18 04:28	09/05/18 04:18	2
Calcium	**5680**		200	67.6	ug/L		09/01/18 04:28	09/05/18 04:18	2
Iron	**615**		120	45.7	ug/L		09/01/18 04:28	09/05/18 04:18	2
Thallium	0.24	U	0.80	0.24	ug/L		09/01/18 04:28	09/05/18 04:18	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 04:51	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 04:51	2
Barium	**10.6**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 04:51	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 04:51	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 04:51	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 17:25	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 04:51	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 17:25	2
Manganese	**9.9**		8.0	2.7	ug/L		08/30/18 01:59	08/30/18 04:51	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 17:25	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 04:51	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 04:51	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 04:51	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 04:51	2
Zinc	**907**		16.0	5.4	ug/L		08/30/18 01:59	08/30/18 04:51	2
Aluminum	**15.4**	**J**	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 04:51	2
Sodium	**2030**		200	75.7	ug/L		08/30/18 01:59	08/30/18 04:51	2
Magnesium	**1260**		200	65.7	ug/L		08/30/18 01:59	08/30/18 04:51	2
Potassium	**444**		200	64.9	ug/L		08/30/18 01:59	08/30/18 04:51	2
Calcium	**5020**		200	67.6	ug/L		08/30/18 01:59	08/30/18 04:51	2
Iron	**78.0**	**J**	120	45.7	ug/L		08/30/18 01:59	08/30/18 04:51	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 04:51	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 14:29	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 11:12	1
Bicarbonate Alkalinity as CaCO3	**21.4**		5.0	5.0	mg/L			08/26/18 12:58	1
Alkalinity	**21.4**		5.0	5.0	mg/L			08/26/18 12:58	1

Client Sample ID: PMS-180-082418

Date Collected: 08/24/18 09:40
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-20
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/31/18 11:54	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: PMS-180-082418
Date Collected: 08/24/18 09:40
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-20
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/31/18 11:54	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/31/18 11:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*70 - 130*		*08/31/18 11:54*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 15:35	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 15:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 15:35	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 15:35	1
1,1-Dichloroethane	**0.44**	**J**	1.0	0.26	ug/L			08/29/18 15:35	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 15:35	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 15:35	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 15:35	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 15:35	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 15:35	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 15:35	1
1,3-Dichlorobenzene	**0.34**	**J**	1.0	0.34	ug/L			08/29/18 15:35	1
1,4-Dichlorobenzene	**1.5**		1.0	0.76	ug/L			08/29/18 15:35	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 15:35	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 15:35	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 15:35	1
Acetone	5.0	U	5.0	5.0	ug/L			08/29/18 15:35	1
Benzene	**10**		1.0	0.43	ug/L			08/29/18 15:35	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 15:35	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 15:35	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/29/18 15:35	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 15:35	1
Chlorobenzene	**3.1**		1.0	0.38	ug/L			08/29/18 15:35	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 15:35	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 15:35	1
Chloroethane	**23**		1.0	0.32	ug/L			08/29/18 15:35	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 15:35	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 15:35	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 15:35	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 15:35	1
Cyclohexane	**1.4**		1.0	0.32	ug/L			08/29/18 15:35	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 15:35	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 15:35	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 15:35	1
Isopropylbenzene	**1.8**		1.0	0.34	ug/L			08/29/18 15:35	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 15:35	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 15:35	1
Methylcyclohexane	**0.36**	**J**	1.0	0.26	ug/L			08/29/18 15:35	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/29/18 15:35	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 15:35	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 15:35	1
Toluene	**0.81**	**J**	1.0	0.38	ug/L			08/29/18 15:35	1

Client Sample ID: PMS-180-082418
Date Collected: 08/24/18 09:40
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-20
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 15:35	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 15:35	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 15:35	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 15:35	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 15:35	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 15:35	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1-Pentene, 2-methyl-	*6.3*	*J N*	*ug/L*		*4.07*	*763-29-1*		*08/29/18 15:35*	*1*
Indane	*11*	*J N*	*ug/L*		*11.07*	*496-11-7*		*08/29/18 15:35*	*1*
1-Phenyl-1-butene	*11*	*J N*	*ug/L*		*11.89*	*824-90-8*		*08/29/18 15:35*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*08/29/18 15:35*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*08/29/18 15:35*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*08/29/18 15:35*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/29/18 15:35*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	21		0.20	0.016	ug/L		08/27/18 08:04	08/28/18 07:54	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/27/18 08:04*	*08/28/18 07:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/26/18 18:05	08/27/18 20:22	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/26/18 18:05	08/27/18 20:22	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 18:05	08/27/18 20:22	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/26/18 18:05	08/27/18 20:22	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 18:05	08/27/18 20:22	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 18:05	08/27/18 20:22	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 18:05	08/27/18 20:22	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 18:05	08/27/18 20:22	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 18:05	08/27/18 20:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 18:05	08/27/18 08:18	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 18:05	08/27/18 08:18	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/26/18 18:05	08/27/18 08:18	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 08:18	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 08:18	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 08:18	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 18:05	08/27/18 08:18	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 08:18	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 18:05	08/27/18 08:18	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 18:05	08/27/18 08:18	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 18:05	08/27/18 08:18	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 18:05	08/27/18 08:18	1

Client Sample ID: PMS-180-082418
Date Collected: 08/24/18 09:40
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-20
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 18:05	08/27/18 08:18	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 18:05	08/27/18 08:18	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 18:05	08/27/18 08:18	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 18:05	08/27/18 08:18	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 18:05	08/27/18 08:18	1
Naphthalene	**1.4**	**J**	10	1.1	ug/L		08/26/18 18:05	08/27/18 08:18	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 18:05	08/27/18 08:18	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/26/18 18:05	08/27/18 08:18	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 08:18	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 18:05	08/27/18 08:18	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 08:18	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 18:05	08/27/18 08:18	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 18:05	08/27/18 08:18	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 18:05	08/27/18 08:18	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 18:05	08/27/18 08:18	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 18:05	08/27/18 08:18	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 08:18	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 08:18	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 18:05	08/27/18 08:18	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 18:05	08/27/18 08:18	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 18:05	08/27/18 08:18	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 18:05	08/27/18 08:18	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 18:05	08/27/18 08:18	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 18:05	08/27/18 08:18	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 08:18	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 08:18	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 08:18	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 18:05	08/27/18 08:18	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 08:18	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 08:18	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 18:05	08/27/18 08:18	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 18:05	08/27/18 08:18	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 18:05	08/27/18 08:18	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 18:05	08/27/18 08:18	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 18:05	08/27/18 08:18	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 18:05	08/27/18 08:18	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 08:18	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 08:18	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 18:05	08/27/18 08:18	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 18:05	08/27/18 08:18	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/26/18 18:05	08/27/18 08:18	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 18:05	08/27/18 08:18	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 08:18	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 08:18	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 08:18	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 08:18	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 08:18	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*7.7*	*J*	*ug/L*		*6.72*		*08/26/18 18:05*	*08/27/18 08:18*	*1*

Client Sample ID: PMS-180-082418

Date Collected: 08/24/18 09:40
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-20

Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Cyclohexanamine, N-cyclohexyl-	12	J N	ug/L		6.88	101-83-7	08/26/18 18:05	08/27/18 08:18	1
Benzenesulfonamide, N-cyclohexyl-4-methyl-	6.5	J N	ug/L		9.98	80-30-8	08/26/18 18:05	08/27/18 08:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	82		30 - 130	08/26/18 18:05	08/27/18 08:18	1
Phenol-d5 (Surr)	23		15 - 110	08/26/18 18:05	08/27/18 08:18	1
Terphenyl-d14 (Surr)	89		30 - 130	08/26/18 18:05	08/27/18 08:18	1
2,4,6-Tribromophenol (Surr)	94		15 - 110	08/26/18 18:05	08/27/18 08:18	1
2-Fluorophenol (Surr)	36		15 - 110	08/26/18 18:05	08/27/18 08:18	1
2-Fluorobiphenyl	83		30 - 130	08/26/18 18:05	08/27/18 08:18	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:34	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:34	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:34	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:34	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:34	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:34	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:34	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:34	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:34	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		30 - 150	08/28/18 09:19	08/29/18 21:34	1
Tetrachloro-m-xylene	79		30 - 150	08/28/18 09:19	08/29/18 21:34	1
DCB Decachlorobiphenyl	50		30 - 150	08/28/18 09:19	08/29/18 21:34	1
DCB Decachlorobiphenyl	58		30 - 150	08/28/18 09:19	08/29/18 21:34	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.77**		0.12	0.078	mg/L			08/26/18 21:47	1
Sulfate	**0.63**		0.60	0.33	mg/L			08/26/18 21:47	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/01/18 04:28	09/05/18 04:28	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/01/18 04:28	09/05/18 04:28	2
Barium	**548**		4.0	1.1	ug/L		09/01/18 04:28	09/05/18 04:28	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:40	08/31/18 15:39	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/01/18 04:28	09/05/18 04:28	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:28	2
Chromium	**5.0**		4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:28	2
Copper	**8.6**		4.0	1.9	ug/L		09/01/18 04:28	09/05/18 04:28	2
Manganese	**1370**		8.0	2.7	ug/L		09/01/18 04:28	09/05/18 04:28	2
Nickel	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:28	2
Lead	**25.2**		1.2	0.37	ug/L		09/01/18 04:28	09/05/18 04:28	2
Antimony	**0.69**	**J**	2.0	0.62	ug/L		09/01/18 04:28	09/05/18 04:28	2

Client Sample ID: PMS-180-082418

Date Collected: 08/24/18 09:40
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-20

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.69	U	10.0	0.69	ug/L		09/01/18 04:28	09/05/18 04:28	2
Vanadium	**8.9**		4.0	1.2	ug/L		09/01/18 04:28	09/05/18 04:28	2
Zinc	**3290**		160	53.8	ug/L		09/01/18 04:28	09/05/18 04:34	20
Aluminum	**51.2**		40.0	15.0	ug/L		09/01/18 04:28	09/05/18 04:28	2
Sodium	**9510**		200	75.7	ug/L		09/01/18 04:28	09/05/18 04:28	2
Magnesium	**7030**		200	65.7	ug/L		09/01/18 04:28	09/05/18 04:28	2
Potassium	**3310**		200	64.9	ug/L		09/01/18 04:28	09/05/18 04:28	2
Calcium	**71700**		200	67.6	ug/L		09/01/18 04:28	09/05/18 04:28	2
Iron	**128000**		120	45.7	ug/L		09/01/18 04:28	09/05/18 04:28	2
Thallium	0.24	U	0.80	0.24	ug/L		09/01/18 04:28	09/05/18 04:28	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 01:59	08/30/18 04:54	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 01:59	08/30/18 04:54	2
Barium	**261**		4.0	1.1	ug/L		08/30/18 01:59	08/30/18 04:54	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:59	08/30/18 04:54	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 01:59	08/30/18 04:54	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 17:18	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 04:54	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 01:59	08/30/18 17:18	2
Manganese	**1050**		8.0	2.7	ug/L		08/30/18 01:59	08/30/18 04:54	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 17:18	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 01:59	08/30/18 04:54	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 01:59	08/30/18 04:54	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 01:59	08/30/18 04:54	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 01:59	08/30/18 04:54	2
Zinc	**241**		16.0	5.4	ug/L		08/30/18 01:59	08/30/18 04:54	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 01:59	08/30/18 04:54	2
Sodium	**6420**		200	75.7	ug/L		08/30/18 01:59	08/30/18 04:54	2
Magnesium	**5110**		200	65.7	ug/L		08/30/18 01:59	08/30/18 04:54	2
Potassium	**2760**		200	64.9	ug/L		08/30/18 01:59	08/30/18 04:54	2
Calcium	**58200**		200	67.6	ug/L		08/30/18 01:59	08/30/18 04:54	2
Iron	**17600**		120	45.7	ug/L		08/30/18 01:59	08/30/18 04:54	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 01:59	08/30/18 04:54	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 14:34	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:13	1
Bicarbonate Alkalinity as CaCO3	**351**		5.0	5.0	mg/L			08/26/18 13:07	1
Alkalinity	**351**		5.0	5.0	mg/L			08/26/18 13:07	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: PMS-230-082418
Date Collected: 08/24/18 11:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-21
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/31/18 10:44	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/31/18 10:44	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/31/18 10:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*08/31/18 10:44*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 12:05	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 12:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 12:05	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 12:05	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 12:05	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 12:05	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 12:05	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 12:05	1
1,2-Dichlorobenzene	**0.90**	**J**	1.0	0.43	ug/L			08/29/18 12:05	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 12:05	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 12:05	1
1,3-Dichlorobenzene	**3.2**		1.0	0.34	ug/L			08/29/18 12:05	1
1,4-Dichlorobenzene	**8.4**		1.0	0.76	ug/L			08/29/18 12:05	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 12:05	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 12:05	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 12:05	1
Acetone	5.0	U	5.0	5.0	ug/L			08/29/18 12:05	1
Benzene	**33**		1.0	0.43	ug/L			08/29/18 12:05	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 12:05	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 12:05	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/29/18 12:05	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 12:05	1
Chlorobenzene	**21**		1.0	0.38	ug/L			08/29/18 12:05	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 12:05	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 12:05	1
Chloroethane	**8.6**		1.0	0.32	ug/L			08/29/18 12:05	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 12:05	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 12:05	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 12:05	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 12:05	1
Cyclohexane	**2.9**		1.0	0.32	ug/L			08/29/18 12:05	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 12:05	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 12:05	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 12:05	1
Isopropylbenzene	**14**		1.0	0.34	ug/L			08/29/18 12:05	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 12:05	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 12:05	1
Methylcyclohexane	**0.68**	**J**	1.0	0.26	ug/L			08/29/18 12:05	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/29/18 12:05	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 12:05	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 12:05	1

Client Sample ID: PMS-230-082418
Date Collected: 08/24/18 11:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-21
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**0.43**	**J**	1.0	0.38	ug/L			08/29/18 12:05	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 12:05	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 12:05	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 12:05	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 12:05	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 12:05	1
Xylenes, Total	**1.1**	**J**	2.0	0.65	ug/L			08/29/18 12:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethyl ether	*1.4*		*ug/L*		*2.56*	*60-29-7*		*08/29/18 12:05*	*1*
Hexane	*0.75*	*J*	*ug/L*		*3.53*	*110-54-3*		*08/29/18 12:05*	*1*
Cyclopentane, methyl-	*14*	*J N*	*ug/L*		*4.07*	*96-37-7*		*08/29/18 12:05*	*1*
Tetrahydrofuran	*4.3*		*ug/L*		*4.51*	*109-99-9*		*08/29/18 12:05*	*1*
1,4-Dioxane	*90*		*ug/L*		*6.09*	*123-91-1*		*08/29/18 12:05*	*1*
N-Propylbenzene	*1.7*		*ug/L*		*10.20*	*103-65-1*		*08/29/18 12:05*	*1*
2,3-Dihydroindene	*6.0*		*ug/L*		*11.07*	*496-11-7*		*08/29/18 12:05*	*1*
p-Diethylbenzene	*0.50*	*J*	*ug/L*		*11.11*	*105-05-5*		*08/29/18 12:05*	*1*
Benzene, 1-methyl-2-(1-methylethyl)-	*7.0*	*J N*	*ug/L*		*11.35*	*527-84-4*		*08/29/18 12:05*	*1*
Benzene, 1,2,3,5-tetramethyl-	*6.8*	*J N*	*ug/L*		*11.60*	*527-53-7*		*08/29/18 12:05*	*1*
Benzene, 1-ethenyl-4-ethyl-	*16*	*J N*	*ug/L*		*11.90*	*3454-07-7*		*08/29/18 12:05*	*1*
Naphthalene	*9.8*		*ug/L*		*12.35*	*91-20-3*		*08/29/18 12:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*08/29/18 12:05*	*1*
4-Bromofluorobenzene	*100*		*70 - 130*		*08/29/18 12:05*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/29/18 12:05*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/29/18 12:05*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**82**		0.40	0.032	ug/L		08/27/18 08:13	08/29/18 11:34	2

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*10*		*10 - 150*	*08/27/18 08:13*	*08/29/18 11:34*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.051	0.016	ug/L		08/28/18 20:11	08/29/18 13:45	1
Benzo[a]pyrene	0.022	U	0.051	0.022	ug/L		08/28/18 20:11	08/29/18 13:45	1
Benzo[b]fluoranthene	0.024	U	0.051	0.024	ug/L		08/28/18 20:11	08/29/18 13:45	1
Bis(2-chloroethyl)ether	0.027	U	0.031	0.027	ug/L		08/28/18 20:11	08/29/18 13:45	1
Dibenz(a,h)anthracene	0.012	U *	0.051	0.012	ug/L		08/28/18 20:11	08/29/18 13:45	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/28/18 20:11	08/29/18 13:45	1
Indeno[1,2,3-cd]pyrene	0.037	U	0.051	0.037	ug/L		08/28/18 20:11	08/29/18 13:45	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/28/18 20:11	08/29/18 13:45	1
Pentachlorophenol	0.16	U	0.20	0.16	ug/L		08/28/18 20:11	08/29/18 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.30	U	10	0.30	ug/L		08/28/18 20:11	08/29/18 11:41	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/28/18 20:11	08/29/18 11:41	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: PMS-230-082418
Date Collected: 08/24/18 11:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-21
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	0.26	U F1	10	0.26	ug/L		08/28/18 20:11	08/29/18 11:41	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 11:41	1
2-Nitrophenol	0.76	U	10	0.76	ug/L		08/28/18 20:11	08/29/18 11:41	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 11:41	1
2,4-Dichlorophenol	0.43	U	10	0.43	ug/L		08/28/18 20:11	08/29/18 11:41	1
4-Chloro-3-methylphenol	0.59	U	10	0.59	ug/L		08/28/18 20:11	08/29/18 11:41	1
2,4,6-Trichlorophenol	0.31	U	10	0.31	ug/L		08/28/18 20:11	08/29/18 11:41	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/28/18 20:11	08/29/18 11:41	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/28/18 20:11	08/29/18 11:41	1
4-Nitrophenol	0.70	U	20	0.70	ug/L		08/28/18 20:11	08/29/18 11:41	1
4,6-Dinitro-2-methylphenol	14	U	20	14	ug/L		08/28/18 20:11	08/29/18 11:41	1
N-Nitrosodi-n-propylamine	0.44	U	1.0	0.44	ug/L		08/28/18 20:11	08/29/18 11:41	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/28/18 20:11	08/29/18 11:41	1
Nitrobenzene	0.58	U	1.0	0.58	ug/L		08/28/18 20:11	08/29/18 11:41	1
Isophorone	0.81	U	10	0.81	ug/L		08/28/18 20:11	08/29/18 11:41	1
Naphthalene	**5.0**	**J**	10	1.2	ug/L		08/28/18 20:11	08/29/18 11:41	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/28/18 20:11	08/29/18 11:41	1
Hexachlorobutadiene	0.80	U	1.0	0.80	ug/L		08/28/18 20:11	08/29/18 11:41	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 11:41	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/28/18 20:11	08/29/18 11:41	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 11:41	1
2-Nitroaniline	0.48	U	10	0.48	ug/L		08/28/18 20:11	08/29/18 11:41	1
Dimethyl phthalate	0.78	U	10	0.78	ug/L		08/28/18 20:11	08/29/18 11:41	1
Acenaphthylene	0.84	U	10	0.84	ug/L		08/28/18 20:11	08/29/18 11:41	1
2,6-Dinitrotoluene	0.40	U	2.0	0.40	ug/L		08/28/18 20:11	08/29/18 11:41	1
3-Nitroaniline	0.98	U F1	10	0.98	ug/L		08/28/18 20:11	08/29/18 11:41	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 11:41	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 11:41	1
2,4-Dinitrophenol	15	U	20	15	ug/L		08/28/18 20:11	08/29/18 11:41	1
Diethyl phthalate	1.0	U	10	1.0	ug/L		08/28/18 20:11	08/29/18 11:41	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/28/18 20:11	08/29/18 11:41	1
Fluorene	0.93	U	10	0.93	ug/L		08/28/18 20:11	08/29/18 11:41	1
4-Nitroaniline	0.55	U	10	0.55	ug/L		08/28/18 20:11	08/29/18 11:41	1
N-Nitrosodiphenylamine	0.91	U	10	0.91	ug/L		08/28/18 20:11	08/29/18 11:41	1
4-Bromophenyl phenyl ether	0.76	U	10	0.76	ug/L		08/28/18 20:11	08/29/18 11:41	1
Phenanthrene	0.59	U	10	0.59	ug/L		08/28/18 20:11	08/29/18 11:41	1
Anthracene	0.65	U	10	0.65	ug/L		08/28/18 20:11	08/29/18 11:41	1
Carbazole	0.69	U	10	0.69	ug/L		08/28/18 20:11	08/29/18 11:41	1
Di-n-butyl phthalate	0.86	U	10	0.86	ug/L		08/28/18 20:11	08/29/18 11:41	1
Fluoranthene	0.86	U	10	0.86	ug/L		08/28/18 20:11	08/29/18 11:41	1
Pyrene	1.7	U	10	1.7	ug/L		08/28/18 20:11	08/29/18 11:41	1
Butyl benzyl phthalate	0.87	U	10	0.87	ug/L		08/28/18 20:11	08/29/18 11:41	1
Chrysene	0.93	U	2.0	0.93	ug/L		08/28/18 20:11	08/29/18 11:41	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/28/18 20:11	08/29/18 11:41	1
Di-n-octyl phthalate	4.9	U	10	4.9	ug/L		08/28/18 20:11	08/29/18 11:41	1
Benzo[k]fluoranthene	0.69	U	1.0	0.69	ug/L		08/28/18 20:11	08/29/18 11:41	1
Benzo[g,h,i]perylene	1.5	U	10	1.5	ug/L		08/28/18 20:11	08/29/18 11:41	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 11:41	1
Acetophenone	0.81	U	10	0.81	ug/L		08/28/18 20:11	08/29/18 11:41	1

Client Sample ID: PMS-230-082418
Date Collected: 08/24/18 11:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-21
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzaldehyde	0.60	U	10	0.60	ug/L		08/28/18 20:11	08/29/18 11:41	1
Caprolactam	0.70	U	10	0.70	ug/L		08/28/18 20:11	08/29/18 11:41	1
Atrazine	1.4	U	2.0	1.4	ug/L		08/28/18 20:11	08/29/18 11:41	1
2,2'-oxybis[1-chloropropane]	0.64	U	10	0.64	ug/L		08/28/18 20:11	08/29/18 11:41	1
1,2,4,5-Tetrachlorobenzene	1.3	U	10	1.3	ug/L		08/28/18 20:11	08/29/18 11:41	1
2,3,4,6-Tetrachlorophenol	0.76	U	10	0.76	ug/L		08/28/18 20:11	08/29/18 11:41	1
3,3'-Dichlorobenzidine	1.5	U	10	1.5	ug/L		08/28/18 20:11	08/29/18 11:41	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 11:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzene, chloro-	*9.1*	*J N*	*ug/L*		*2.97*	*108-90-7*	*08/28/18 20:11*	*08/29/18 11:41*	*1*
Benzene, (1-methylethyl)-	*8.8*	*J N*	*ug/L*		*3.66*	*98-82-8*	*08/28/18 20:11*	*08/29/18 11:41*	*1*
Unknown	*35*	*J*	*ug/L*		*6.91*		*08/28/18 20:11*	*08/29/18 11:41*	*1*
Cyclohexanamine, N-cyclohexyl-	*26*	*J N*	*ug/L*		*7.14*	*101-83-7*	*08/28/18 20:11*	*08/29/18 11:41*	*1*
2(3H)-Benzothiazolone	*7.0*	*J N*	*ug/L*		*8.32*	*934-34-9*	*08/28/18 20:11*	*08/29/18 11:41*	*1*
Unknown	*15*	*J*	*ug/L*		*9.82*		*08/28/18 20:11*	*08/29/18 11:41*	*1*
Benzenesulfonamide, N-cyclohexyl-4-methyl-	*11*	*J N*	*ug/L*		*10.31*	*80-30-8*	*08/28/18 20:11*	*08/29/18 11:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*86*		*30 - 130*	*08/28/18 20:11*	*08/29/18 11:41*	*1*
Phenol-d5 (Surr)	*31*		*15 - 110*	*08/28/18 20:11*	*08/29/18 11:41*	*1*
Terphenyl-d14 (Surr)	*88*		*30 - 130*	*08/28/18 20:11*	*08/29/18 11:41*	*1*
2,4,6-Tribromophenol (Surr)	*100*		*15 - 110*	*08/28/18 20:11*	*08/29/18 11:41*	*1*
2-Fluorophenol (Surr)	*47*		*15 - 110*	*08/28/18 20:11*	*08/29/18 11:41*	*1*
2-Fluorobiphenyl	*88*		*30 - 130*	*08/28/18 20:11*	*08/29/18 11:41*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/31/18 02:57	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/31/18 02:57	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/31/18 02:57	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/31/18 02:57	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/31/18 02:57	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/31/18 02:57	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/29/18 09:36	08/31/18 02:57	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/29/18 09:36	08/31/18 02:57	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/29/18 09:36	08/31/18 02:57	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/29/18 09:36	08/31/18 02:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*30 - 150*	*08/29/18 09:36*	*08/31/18 02:57*	*1*
Tetrachloro-m-xylene	*65*		*30 - 150*	*08/29/18 09:36*	*08/31/18 02:57*	*1*
DCB Decachlorobiphenyl	*37*		*30 - 150*	*08/29/18 09:36*	*08/31/18 02:57*	*1*
DCB Decachlorobiphenyl	*38*		*30 - 150*	*08/29/18 09:36*	*08/31/18 02:57*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.33	U	0.60	0.33	mg/L			08/26/18 21:03	1

Client Sample ID: PMS-230-082418
Date Collected: 08/24/18 11:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-21
Matrix: Water

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.3**	**D**	0.48	0.31	mg/L			08/27/18 13:31	4

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/01/18 04:28	09/05/18 03:35	2
Arsenic	**4.1**		2.0	0.77	ug/L		09/01/18 04:28	09/05/18 03:35	2
Barium	**499**		4.0	1.1	ug/L		09/01/18 04:28	09/05/18 03:35	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:40	08/31/18 14:59	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/01/18 04:28	09/05/18 03:35	2
Cobalt	**2.4**	**J**	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 03:35	2
Chromium	**9.0**		4.0	1.3	ug/L		09/01/18 04:28	09/05/18 03:35	2
Copper	**13.2**		4.0	1.9	ug/L		09/01/18 04:28	09/05/18 03:35	2
Manganese	**1990**		8.0	2.7	ug/L		09/01/18 04:28	09/05/18 03:35	2
Nickel	**4.8**		4.0	1.3	ug/L		09/01/18 04:28	09/05/18 03:35	2
Lead	**54.5**		1.2	0.37	ug/L		09/01/18 04:28	09/05/18 03:35	2
Antimony	**0.80**	**J**	2.0	0.62	ug/L		09/01/18 04:28	09/05/18 03:35	2
Selenium	0.69	U	10.0	0.69	ug/L		09/01/18 04:28	09/05/18 03:35	2
Vanadium	**4.0**		4.0	1.2	ug/L		09/01/18 04:28	09/05/18 03:35	2
Zinc	**669**		16.0	5.4	ug/L		09/01/18 04:28	09/05/18 03:35	2
Aluminum	**41.4**		40.0	15.0	ug/L		09/01/18 04:28	09/05/18 03:35	2
Sodium	**30200**		200	75.7	ug/L		09/01/18 04:28	09/05/18 03:35	2
Magnesium	**11600**		200	65.7	ug/L		09/01/18 04:28	09/05/18 03:35	2
Potassium	**7700**		200	64.9	ug/L		09/01/18 04:28	09/05/18 03:35	2
Calcium	**96000**		200	67.6	ug/L		09/01/18 04:28	09/05/18 03:35	2
Iron	**134000**		120	45.7	ug/L		09/01/18 04:28	09/05/18 03:35	2
Thallium	0.24	U	0.80	0.24	ug/L		09/01/18 04:28	09/05/18 03:35	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 01:10	09/14/18 01:47	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/14/18 01:10	09/14/18 01:47	2
Barium	**126**		4.0	1.1	ug/L		09/14/18 01:10	09/14/18 01:47	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 01:10	09/14/18 01:47	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 01:10	09/14/18 01:47	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 01:10	09/14/18 01:47	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 01:10	09/14/18 01:47	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 01:10	09/14/18 01:47	2
Manganese	**1890**		8.0	2.7	ug/L		09/14/18 01:10	09/14/18 01:47	2
Nickel	**2.6**	**J**	4.0	1.3	ug/L		09/14/18 01:10	09/14/18 01:47	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 01:10	09/14/18 01:47	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 01:10	09/14/18 01:47	2
Selenium	0.69	U F1	10.0	0.69	ug/L		09/14/18 01:10	09/14/18 01:47	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/14/18 01:10	09/14/18 01:47	2
Zinc	**91.2**		16.0	5.4	ug/L		09/14/18 01:10	09/14/18 01:47	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/14/18 01:10	09/14/18 01:47	2
Sodium	**29500**		200	75.7	ug/L		08/30/18 13:04	08/31/18 10:56	2
Magnesium	**11900**		200	65.7	ug/L		09/14/18 01:10	09/14/18 01:47	2
Potassium	**8030**		200	64.9	ug/L		08/30/18 13:04	08/31/18 10:56	2
Calcium	**91500**		200	67.6	ug/L		09/14/18 01:10	09/14/18 01:47	2
Iron	**5710**		120	45.7	ug/L		09/14/18 01:10	09/14/18 01:47	2

Client Sample ID: PMS-230-082418

Lab Sample ID: 460-163302-21

Date Collected: 08/24/18 11:15

Matrix: Water

Date Received: 08/24/18 17:10

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 01:10	09/14/18 01:47	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 13:56	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:14	1
Bicarbonate Alkalinity as CaCO3	**565**		5.0	5.0	mg/L			08/26/18 08:03	1
Alkalinity	**565**		5.0	5.0	mg/L			08/26/18 08:03	1

Client Sample ID: SC-01-082418

Lab Sample ID: 460-163302-22

Date Collected: 08/24/18 12:50

Matrix: Water

Date Received: 08/24/18 17:10

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.45**		0.20	0.016	ug/L		08/27/18 08:09	08/28/18 08:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*34*		*10 - 150*	*08/27/18 08:09*	*08/28/18 08:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**0.027**	**J**	0.050	0.016	ug/L		08/26/18 18:05	08/27/18 20:43	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/26/18 18:05	08/27/18 20:43	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 18:05	08/27/18 20:43	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/26/18 18:05	08/27/18 20:43	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 18:05	08/27/18 20:43	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 18:05	08/27/18 20:43	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 18:05	08/27/18 20:43	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 18:05	08/27/18 20:43	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 18:05	08/27/18 20:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 18:05	08/27/18 08:39	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 18:05	08/27/18 08:39	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/26/18 18:05	08/27/18 08:39	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 08:39	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 08:39	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 08:39	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 18:05	08/27/18 08:39	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 08:39	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 18:05	08/27/18 08:39	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 18:05	08/27/18 08:39	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 18:05	08/27/18 08:39	1

Client Sample ID: SC-01-082418
Date Collected: 08/24/18 12:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-22
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 18:05	08/27/18 08:39	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 18:05	08/27/18 08:39	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 18:05	08/27/18 08:39	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 18:05	08/27/18 08:39	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 18:05	08/27/18 08:39	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 18:05	08/27/18 08:39	1
Naphthalene	**4.5**	**J**	10	1.1	ug/L		08/26/18 18:05	08/27/18 08:39	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 18:05	08/27/18 08:39	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/26/18 18:05	08/27/18 08:39	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 08:39	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 18:05	08/27/18 08:39	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 08:39	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 18:05	08/27/18 08:39	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 18:05	08/27/18 08:39	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 18:05	08/27/18 08:39	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 18:05	08/27/18 08:39	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 18:05	08/27/18 08:39	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 08:39	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 08:39	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 18:05	08/27/18 08:39	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 18:05	08/27/18 08:39	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 18:05	08/27/18 08:39	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 18:05	08/27/18 08:39	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 18:05	08/27/18 08:39	1
N-Nitrosodiphenylamine	**1.1**	**J**	10	0.89	ug/L		08/26/18 18:05	08/27/18 08:39	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 08:39	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 08:39	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 08:39	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 18:05	08/27/18 08:39	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 08:39	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 08:39	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 18:05	08/27/18 08:39	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 18:05	08/27/18 08:39	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 18:05	08/27/18 08:39	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 18:05	08/27/18 08:39	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 18:05	08/27/18 08:39	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 18:05	08/27/18 08:39	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 08:39	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 08:39	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 18:05	08/27/18 08:39	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 18:05	08/27/18 08:39	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/26/18 18:05	08/27/18 08:39	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 18:05	08/27/18 08:39	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 08:39	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 08:39	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 08:39	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 08:39	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 08:39	1

Client Sample ID: SC-01-082418

Date Collected: 08/24/18 12:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-22

Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Benzenesulfonamide, N-cyclohexyl-4-methyl-	7.2	J N	ug/L		9.98	80-30-8	08/26/18 18:05	08/27/18 08:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	81		30 - 130	08/26/18 18:05	08/27/18 08:39	1
Phenol-d5 (Surr)	22		15 - 110	08/26/18 18:05	08/27/18 08:39	1
Terphenyl-d14 (Surr)	87		30 - 130	08/26/18 18:05	08/27/18 08:39	1
2,4,6-Tribromophenol (Surr)	82		15 - 110	08/26/18 18:05	08/27/18 08:39	1
2-Fluorophenol (Surr)	34		15 - 110	08/26/18 18:05	08/27/18 08:39	1
2-Fluorobiphenyl	80		30 - 130	08/26/18 18:05	08/27/18 08:39	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:50	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:50	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:50	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:50	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:50	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 21:50	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:50	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:50	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:50	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 21:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		30 - 150	08/28/18 09:19	08/29/18 21:50	1
Tetrachloro-m-xylene	58		30 - 150	08/28/18 09:19	08/29/18 21:50	1
DCB Decachlorobiphenyl	52		30 - 150	08/28/18 09:19	08/29/18 21:50	1
DCB Decachlorobiphenyl	43		30 - 150	08/28/18 09:19	08/29/18 21:50	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.97**		0.12	0.078	mg/L			08/26/18 21:58	1
Sulfate	**0.62**		0.60	0.33	mg/L			08/26/18 21:58	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/01/18 04:28	09/05/18 04:39	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/01/18 04:28	09/05/18 04:39	2
Barium	**361**		4.0	1.1	ug/L		09/01/18 04:28	09/05/18 04:39	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:40	08/31/18 15:41	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/01/18 04:28	09/05/18 04:39	2
Cobalt	**2.6**	**J**	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:39	2
Chromium	**7.3**		4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:39	2
Copper	**3.1**	**J**	4.0	1.9	ug/L		09/01/18 04:28	09/05/18 04:39	2
Manganese	**458**		8.0	2.7	ug/L		09/01/18 04:28	09/05/18 04:39	2
Nickel	**11.3**		4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:39	2
Lead	**5.7**		1.2	0.37	ug/L		09/01/18 04:28	09/05/18 04:39	2
Antimony	**0.72**	**J**	2.0	0.62	ug/L		09/01/18 04:28	09/05/18 04:39	2
Selenium	0.69	U	10.0	0.69	ug/L		09/01/18 04:28	09/05/18 04:39	2
Vanadium	**3.2**	**J**	4.0	1.2	ug/L		09/01/18 04:28	09/05/18 04:39	2

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: SC-01-082418
Date Collected: 08/24/18 12:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-22
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	**56.1**		16.0	5.4	ug/L		09/01/18 04:28	09/05/18 04:39	2
Aluminum	**57.7**		40.0	15.0	ug/L		09/01/18 04:28	09/05/18 04:39	2
Sodium	**3670**		200	75.7	ug/L		09/01/18 04:28	09/05/18 04:39	2
Magnesium	**3560**		200	65.7	ug/L		09/01/18 04:28	09/05/18 04:39	2
Potassium	**1970**		200	64.9	ug/L		09/01/18 04:28	09/05/18 04:39	2
Calcium	**25600**		200	67.6	ug/L		09/01/18 04:28	09/05/18 04:39	2
Iron	**54600**		120	45.7	ug/L		09/01/18 04:28	09/05/18 04:39	2
Thallium	0.24	U	0.80	0.24	ug/L		09/01/18 04:28	09/05/18 04:39	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 01:10	09/14/18 01:53	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/14/18 01:10	09/14/18 01:53	2
Barium	**291**		4.0	1.1	ug/L		09/14/18 01:10	09/14/18 01:53	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 01:10	09/14/18 01:53	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 01:10	09/14/18 01:53	2
Cobalt	**2.1**	**J**	4.0	1.3	ug/L		09/14/18 01:10	09/14/18 01:53	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 01:10	09/14/18 01:53	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 01:10	09/14/18 01:53	2
Manganese	**434**		8.0	2.7	ug/L		09/14/18 01:10	09/14/18 01:53	2
Nickel	**9.0**		4.0	1.3	ug/L		09/14/18 01:10	09/14/18 01:53	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 01:10	09/14/18 01:53	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 01:10	09/14/18 01:53	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 01:10	09/14/18 01:53	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/14/18 01:10	09/14/18 01:53	2
Zinc	**44.5**		16.0	5.4	ug/L		09/14/18 01:10	09/14/18 01:53	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/14/18 01:10	09/14/18 01:53	2
Sodium	**2980**		200	75.7	ug/L		08/30/18 13:04	08/31/18 11:03	2
Magnesium	**3360**		200	65.7	ug/L		09/14/18 01:10	09/14/18 01:53	2
Potassium	**1900**		200	64.9	ug/L		08/30/18 13:04	08/31/18 11:03	2
Calcium	**24400**		200	67.6	ug/L		09/14/18 01:10	09/14/18 01:53	2
Iron	**5970**		120	45.7	ug/L		09/14/18 01:10	09/14/18 01:53	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 01:10	09/14/18 01:53	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 14:39	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:17	1
Bicarbonate Alkalinity as CaCO3	**152**		5.0	5.0	mg/L			08/26/18 13:21	1
Alkalinity	**152**		5.0	5.0	mg/L			08/26/18 13:21	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: FB-03-082418
Date Collected: 08/24/18 12:30
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-23
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/31/18 10:21	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/31/18 10:21	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/31/18 10:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*70 - 130*		*08/31/18 10:21*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 14:01	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 14:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 14:01	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 14:01	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 14:01	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 14:01	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 14:01	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 14:01	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 14:01	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 14:01	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 14:01	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/29/18 14:01	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/29/18 14:01	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 14:01	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 14:01	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 14:01	1
Acetone	5.0	U	5.0	5.0	ug/L			08/29/18 14:01	1
Benzene	0.43	U	1.0	0.43	ug/L			08/29/18 14:01	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 14:01	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 14:01	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/29/18 14:01	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 14:01	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/29/18 14:01	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 14:01	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 14:01	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/29/18 14:01	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 14:01	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 14:01	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 14:01	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 14:01	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/29/18 14:01	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 14:01	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 14:01	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 14:01	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/29/18 14:01	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 14:01	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 14:01	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/29/18 14:01	1
Methylene Chloride	**1.8**		1.0	0.32	ug/L			08/29/18 14:01	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 14:01	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 14:01	1

Client Sample ID: FB-03-082418
Date Collected: 08/24/18 12:30
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-23
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/29/18 14:01	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 14:01	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 14:01	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 14:01	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 14:01	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 14:01	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 14:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/18 14:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*08/29/18 14:01*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*08/29/18 14:01*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/29/18 14:01*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/29/18 14:01*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.26**		0.20	0.016	ug/L		08/27/18 08:13	08/28/18 11:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*30*		*10 - 150*	*08/27/18 08:13*	*08/28/18 11:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/26/18 18:05	08/27/18 21:04	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/26/18 18:05	08/27/18 21:04	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 18:05	08/27/18 21:04	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/26/18 18:05	08/27/18 21:04	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/26/18 18:05	08/27/18 21:04	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/26/18 18:05	08/27/18 21:04	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/26/18 18:05	08/27/18 21:04	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 18:05	08/27/18 21:04	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 18:05	08/27/18 21:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 18:05	08/27/18 09:00	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 18:05	08/27/18 09:00	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/26/18 18:05	08/27/18 09:00	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 09:00	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 09:00	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 09:00	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 18:05	08/27/18 09:00	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 09:00	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 18:05	08/27/18 09:00	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 18:05	08/27/18 09:00	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 18:05	08/27/18 09:00	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 18:05	08/27/18 09:00	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 18:05	08/27/18 09:00	1

Client Sample ID: FB-03-082418
Date Collected: 08/24/18 12:30
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-23
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 18:05	08/27/18 09:00	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 18:05	08/27/18 09:00	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 18:05	08/27/18 09:00	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 18:05	08/27/18 09:00	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 09:00	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 18:05	08/27/18 09:00	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/26/18 18:05	08/27/18 09:00	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 09:00	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 18:05	08/27/18 09:00	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 09:00	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 18:05	08/27/18 09:00	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 18:05	08/27/18 09:00	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 18:05	08/27/18 09:00	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 18:05	08/27/18 09:00	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 18:05	08/27/18 09:00	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 09:00	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/27/18 09:00	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 18:05	08/27/18 09:00	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 18:05	08/27/18 09:00	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 18:05	08/27/18 09:00	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 18:05	08/27/18 09:00	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 18:05	08/27/18 09:00	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 18:05	08/27/18 09:00	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 09:00	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/27/18 09:00	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 09:00	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 18:05	08/27/18 09:00	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 09:00	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/27/18 09:00	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 18:05	08/27/18 09:00	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 18:05	08/27/18 09:00	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 18:05	08/27/18 09:00	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 18:05	08/27/18 09:00	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 18:05	08/27/18 09:00	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 18:05	08/27/18 09:00	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 09:00	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 09:00	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 18:05	08/27/18 09:00	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 18:05	08/27/18 09:00	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/26/18 18:05	08/27/18 09:00	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 18:05	08/27/18 09:00	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/27/18 09:00	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/27/18 09:00	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/27/18 09:00	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/27/18 09:00	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/27/18 09:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 18:05*	*08/27/18 09:00*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: FB-03-082418
Date Collected: 08/24/18 12:30
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-23
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	88		30 - 130	08/26/18 18:05	08/27/18 09:00	1
Phenol-d5 (Surr)	23		15 - 110	08/26/18 18:05	08/27/18 09:00	1
Terphenyl-d14 (Surr)	94		30 - 130	08/26/18 18:05	08/27/18 09:00	1
2,4,6-Tribromophenol (Surr)	86		15 - 110	08/26/18 18:05	08/27/18 09:00	1
2-Fluorophenol (Surr)	37		15 - 110	08/26/18 18:05	08/27/18 09:00	1
2-Fluorobiphenyl	85		30 - 130	08/26/18 18:05	08/27/18 09:00	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 22:06	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 22:06	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 22:06	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 22:06	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 22:06	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 22:06	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 22:06	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 22:06	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 22:06	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 22:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	83		30 - 150	08/28/18 09:19	08/29/18 22:06	1
Tetrachloro-m-xylene	85		30 - 150	08/28/18 09:19	08/29/18 22:06	1
DCB Decachlorobiphenyl	37		30 - 150	08/28/18 09:19	08/29/18 22:06	1
DCB Decachlorobiphenyl	36		30 - 150	08/28/18 09:19	08/29/18 22:06	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/26/18 21:54	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/26/18 21:54	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/01/18 04:28	09/05/18 04:47	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/01/18 04:28	09/05/18 04:47	2
Barium	1.1	U	4.0	1.1	ug/L		09/01/18 04:28	09/05/18 04:47	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:40	08/31/18 16:01	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/01/18 04:28	09/05/18 04:47	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:47	2
Chromium	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:47	2
Copper	1.9	U	4.0	1.9	ug/L		09/06/18 23:55	09/08/18 23:06	2
Manganese	2.7	U	8.0	2.7	ug/L		09/01/18 04:28	09/05/18 04:47	2
Nickel	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:47	2
Lead	0.37	U	1.2	0.37	ug/L		09/01/18 04:28	09/05/18 04:47	2
Antimony	0.62	U	2.0	0.62	ug/L		09/01/18 04:28	09/05/18 04:47	2
Selenium	0.69	U	10.0	0.69	ug/L		09/01/18 04:28	09/05/18 04:47	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/01/18 04:28	09/05/18 04:47	2
Zinc	5.4	U	16.0	5.4	ug/L		09/01/18 04:28	09/05/18 04:47	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/01/18 04:28	09/05/18 04:47	2
Sodium	75.7	U	200	75.7	ug/L		09/01/18 04:28	09/05/18 04:47	2
Magnesium	65.7	U	200	65.7	ug/L		09/01/18 04:28	09/05/18 04:47	2

Client Sample ID: FB-03-082418

Lab Sample ID: 460-163302-23

Date Collected: 08/24/18 12:30

Matrix: Water

Date Received: 08/24/18 17:10

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	64.9	U	200	64.9	ug/L		09/01/18 04:28	09/05/18 04:47	2
Calcium	67.6	U	200	67.6	ug/L		09/01/18 04:28	09/05/18 04:47	2
Iron	45.7	U	120	45.7	ug/L		09/01/18 04:28	09/05/18 04:47	2
Thallium	0.24	U	0.80	0.24	ug/L		09/01/18 04:28	09/05/18 04:47	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 01:10	09/14/18 01:37	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/14/18 01:10	09/14/18 01:37	2
Barium	**1.9**	**J**	4.0	1.1	ug/L		09/14/18 01:10	09/14/18 01:37	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 01:10	09/14/18 01:37	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 01:10	09/14/18 01:37	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 01:10	09/14/18 01:37	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 01:10	09/14/18 01:37	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 01:10	09/14/18 01:37	2
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 01:10	09/14/18 01:37	2
Nickel	1.3	U	4.0	1.3	ug/L		09/14/18 01:10	09/14/18 01:37	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 01:10	09/14/18 01:37	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 01:10	09/14/18 01:37	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 01:10	09/14/18 01:37	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/14/18 01:10	09/14/18 01:37	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 01:10	09/14/18 01:37	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/14/18 01:10	09/14/18 01:37	2
Sodium	**247**		200	75.7	ug/L		08/30/18 13:04	08/31/18 11:06	2
Magnesium	65.7	U	200	65.7	ug/L		09/14/18 01:10	09/14/18 01:37	2
Potassium	64.9	U	200	64.9	ug/L		08/30/18 13:04	08/31/18 11:06	2
Calcium	67.6	U	200	67.6	ug/L		09/14/18 01:10	09/14/18 01:37	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 01:10	09/14/18 01:37	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 01:10	09/14/18 01:37	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 14:41	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:17	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/26/18 13:40	1
Alkalinity	5.0	U	5.0	5.0	mg/L			08/26/18 13:40	1

Client Sample ID: RW-5-082418

Lab Sample ID: 460-163302-24

Date Collected: 08/24/18 11:55

Matrix: Water

Date Received: 08/24/18 17:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/31/18 12:40	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: RW-5-082418
Date Collected: 08/24/18 11:55
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-24
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/31/18 12:40	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/31/18 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*70 - 130*		*08/31/18 12:40*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 16:22	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 16:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 16:22	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 16:22	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 16:22	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 16:22	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 16:22	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 16:22	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 16:22	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 16:22	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 16:22	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/29/18 16:22	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/29/18 16:22	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 16:22	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 16:22	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 16:22	1
Acetone	5.0	U	5.0	5.0	ug/L			08/29/18 16:22	1
Benzene	0.43	U	1.0	0.43	ug/L			08/29/18 16:22	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 16:22	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 16:22	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/29/18 16:22	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 16:22	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/29/18 16:22	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 16:22	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 16:22	1
Chloroethane	**1.2**		1.0	0.32	ug/L			08/29/18 16:22	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 16:22	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 16:22	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 16:22	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 16:22	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/29/18 16:22	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 16:22	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 16:22	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 16:22	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/29/18 16:22	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 16:22	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 16:22	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/29/18 16:22	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/29/18 16:22	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 16:22	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 16:22	1
Toluene	0.38	U	1.0	0.38	ug/L			08/29/18 16:22	1

Client Sample ID: RW-5-082418
Date Collected: 08/24/18 11:55
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-24
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 16:22	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 16:22	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 16:22	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 16:22	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 16:22	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 16:22	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/18 16:22*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*		*08/29/18 16:22*	*1*
4-Bromofluorobenzene	*92*		*70 - 130*		*08/29/18 16:22*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*		*08/29/18 16:22*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/29/18 16:22*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.8**		0.20	0.016	ug/L		08/27/18 08:13	08/28/18 11:18	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*32*		*10 - 150*	*08/27/18 08:13*	*08/28/18 11:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.052	0.016	ug/L		08/28/18 20:11	08/29/18 14:07	1
Benzo[a]pyrene	0.023	U	0.052	0.023	ug/L		08/28/18 20:11	08/29/18 14:07	1
Benzo[b]fluoranthene	0.025	U	0.052	0.025	ug/L		08/28/18 20:11	08/29/18 14:07	1
Bis(2-chloroethyl)ether	0.027	U	0.031	0.027	ug/L		08/28/18 20:11	08/29/18 14:07	1
Dibenz(a,h)anthracene	0.012	U *	0.052	0.012	ug/L		08/28/18 20:11	08/29/18 14:07	1
Hexachlorobenzene	0.014	U	0.021	0.014	ug/L		08/28/18 20:11	08/29/18 14:07	1
Indeno[1,2,3-cd]pyrene	0.038	U	0.052	0.038	ug/L		08/28/18 20:11	08/29/18 14:07	1
N-Nitrosodimethylamine	0.12	U	0.21	0.12	ug/L		08/28/18 20:11	08/29/18 14:07	1
Pentachlorophenol	0.16	U	0.21	0.16	ug/L		08/28/18 20:11	08/29/18 14:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.30	U	10	0.30	ug/L		08/28/18 20:11	08/29/18 14:09	1
2-Chlorophenol	0.39	U	10	0.39	ug/L		08/28/18 20:11	08/29/18 14:09	1
2-Methylphenol	0.27	U	10	0.27	ug/L		08/28/18 20:11	08/29/18 14:09	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 14:09	1
2-Nitrophenol	0.78	U	10	0.78	ug/L		08/28/18 20:11	08/29/18 14:09	1
2,4-Dimethylphenol	0.25	U	10	0.25	ug/L		08/28/18 20:11	08/29/18 14:09	1
2,4-Dichlorophenol	0.44	U	10	0.44	ug/L		08/28/18 20:11	08/29/18 14:09	1
4-Chloro-3-methylphenol	0.60	U	10	0.60	ug/L		08/28/18 20:11	08/29/18 14:09	1
2,4,6-Trichlorophenol	0.31	U	10	0.31	ug/L		08/28/18 20:11	08/29/18 14:09	1
2,4,5-Trichlorophenol	0.29	U	10	0.29	ug/L		08/28/18 20:11	08/29/18 14:09	1
2,4-Dinitrotoluene	1.0	U	2.1	1.0	ug/L		08/28/18 20:11	08/29/18 14:09	1
4-Nitrophenol	0.72	U	21	0.72	ug/L		08/28/18 20:11	08/29/18 14:09	1
4,6-Dinitro-2-methylphenol	14	U	21	14	ug/L		08/28/18 20:11	08/29/18 14:09	1
N-Nitrosodi-n-propylamine	0.45	U	1.0	0.45	ug/L		08/28/18 20:11	08/29/18 14:09	1

Client Sample ID: RW-5-082418
Date Collected: 08/24/18 11:55
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-24
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.1	1.2	ug/L		08/28/18 20:11	08/29/18 14:09	1
Nitrobenzene	0.59	U	1.0	0.59	ug/L		08/28/18 20:11	08/29/18 14:09	1
Isophorone	0.83	U	10	0.83	ug/L		08/28/18 20:11	08/29/18 14:09	1
Naphthalene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 14:09	1
4-Chloroaniline	2.0	U	10	2.0	ug/L		08/28/18 20:11	08/29/18 14:09	1
Hexachlorobutadiene	0.81	U	1.0	0.81	ug/L		08/28/18 20:11	08/29/18 14:09	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 14:09	1
Hexachlorocyclopentadiene	1.8	U	10	1.8	ug/L		08/28/18 20:11	08/29/18 14:09	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 14:09	1
2-Nitroaniline	0.49	U	10	0.49	ug/L		08/28/18 20:11	08/29/18 14:09	1
Dimethyl phthalate	0.80	U	10	0.80	ug/L		08/28/18 20:11	08/29/18 14:09	1
Acenaphthylene	0.86	U	10	0.86	ug/L		08/28/18 20:11	08/29/18 14:09	1
2,6-Dinitrotoluene	0.41	U	2.1	0.41	ug/L		08/28/18 20:11	08/29/18 14:09	1
3-Nitroaniline	1.0	U	10	1.0	ug/L		08/28/18 20:11	08/29/18 14:09	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 14:09	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 14:09	1
2,4-Dinitrophenol	15	U	21	15	ug/L		08/28/18 20:11	08/29/18 14:09	1
Diethyl phthalate	1.0	U	10	1.0	ug/L		08/28/18 20:11	08/29/18 14:09	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/28/18 20:11	08/29/18 14:09	1
Fluorene	0.95	U	10	0.95	ug/L		08/28/18 20:11	08/29/18 14:09	1
4-Nitroaniline	0.57	U	10	0.57	ug/L		08/28/18 20:11	08/29/18 14:09	1
N-Nitrosodiphenylamine	0.93	U	10	0.93	ug/L		08/28/18 20:11	08/29/18 14:09	1
4-Bromophenyl phenyl ether	0.78	U	10	0.78	ug/L		08/28/18 20:11	08/29/18 14:09	1
Phenanthrene	0.60	U	10	0.60	ug/L		08/28/18 20:11	08/29/18 14:09	1
Anthracene	0.66	U	10	0.66	ug/L		08/28/18 20:11	08/29/18 14:09	1
Carbazole	0.71	U	10	0.71	ug/L		08/28/18 20:11	08/29/18 14:09	1
Di-n-butyl phthalate	0.88	U	10	0.88	ug/L		08/28/18 20:11	08/29/18 14:09	1
Fluoranthene	0.88	U	10	0.88	ug/L		08/28/18 20:11	08/29/18 14:09	1
Pyrene	1.7	U	10	1.7	ug/L		08/28/18 20:11	08/29/18 14:09	1
Butyl benzyl phthalate	0.89	U	10	0.89	ug/L		08/28/18 20:11	08/29/18 14:09	1
Chrysene	0.94	U	2.1	0.94	ug/L		08/28/18 20:11	08/29/18 14:09	1
Bis(2-ethylhexyl) phthalate	1.8	U	2.1	1.8	ug/L		08/28/18 20:11	08/29/18 14:09	1
Di-n-octyl phthalate	5.0	U	10	5.0	ug/L		08/28/18 20:11	08/29/18 14:09	1
Benzo[k]fluoranthene	0.70	U	1.0	0.70	ug/L		08/28/18 20:11	08/29/18 14:09	1
Benzo[g,h,i]perylene	1.5	U	10	1.5	ug/L		08/28/18 20:11	08/29/18 14:09	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 14:09	1
Acetophenone	0.82	U	10	0.82	ug/L		08/28/18 20:11	08/29/18 14:09	1
Benzaldehyde	0.62	U	10	0.62	ug/L		08/28/18 20:11	08/29/18 14:09	1
Caprolactam	0.71	U	10	0.71	ug/L		08/28/18 20:11	08/29/18 14:09	1
Atrazine	1.4	U	2.1	1.4	ug/L		08/28/18 20:11	08/29/18 14:09	1
2,2'-oxybis[1-chloropropane]	0.66	U	10	0.66	ug/L		08/28/18 20:11	08/29/18 14:09	1
1,2,4,5-Tetrachlorobenzene	1.3	U	10	1.3	ug/L		08/28/18 20:11	08/29/18 14:09	1
2,3,4,6-Tetrachlorophenol	0.78	U	10	0.78	ug/L		08/28/18 20:11	08/29/18 14:09	1
3,3'-Dichlorobenzidine	1.5	U	10	1.5	ug/L		08/28/18 20:11	08/29/18 14:09	1
Bis(2-chloroethoxy)methane	0.25	U	10	0.25	ug/L		08/28/18 20:11	08/29/18 14:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/28/18 20:11*	*08/29/18 14:09*	*1*

Client Sample ID: RW-5-082418
Date Collected: 08/24/18 11:55
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-24
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*84*		*30 - 130*	*08/28/18 20:11*	*08/29/18 14:09*	*1*
Phenol-d5 (Surr)	*28*		*15 - 110*	*08/28/18 20:11*	*08/29/18 14:09*	*1*
Terphenyl-d14 (Surr)	*84*		*30 - 130*	*08/28/18 20:11*	*08/29/18 14:09*	*1*
2,4,6-Tribromophenol (Surr)	*85*		*15 - 110*	*08/28/18 20:11*	*08/29/18 14:09*	*1*
2-Fluorophenol (Surr)	*42*		*15 - 110*	*08/28/18 20:11*	*08/29/18 14:09*	*1*
2-Fluorobiphenyl	*84*		*30 - 130*	*08/28/18 20:11*	*08/29/18 14:09*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/30/18 00:25	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/30/18 00:25	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/30/18 00:25	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/30/18 00:25	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/30/18 00:25	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/30/18 00:25	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/29/18 09:36	08/30/18 00:25	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/29/18 09:36	08/30/18 00:25	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/29/18 09:36	08/30/18 00:25	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/29/18 09:36	08/30/18 00:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*61*		*30 - 150*	*08/29/18 09:36*	*08/30/18 00:25*	*1*
Tetrachloro-m-xylene	*60*		*30 - 150*	*08/29/18 09:36*	*08/30/18 00:25*	*1*
DCB Decachlorobiphenyl	*52*		*30 - 150*	*08/29/18 09:36*	*08/30/18 00:25*	*1*
DCB Decachlorobiphenyl	*54*		*30 - 150*	*08/29/18 09:36*	*08/30/18 00:25*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.45**		0.12	0.078	mg/L			08/26/18 22:07	1
Sulfate	**22.7**		0.60	0.33	mg/L			08/26/18 22:07	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/01/18 04:28	09/05/18 04:50	2
Arsenic	**14.3**		2.0	0.77	ug/L		09/01/18 04:28	09/05/18 04:50	2
Barium	**7.8**		4.0	1.1	ug/L		09/01/18 04:28	09/05/18 04:50	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:40	08/31/18 15:46	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/01/18 04:28	09/05/18 04:50	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:50	2
Chromium	**2.7**	**J**	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:50	2
Copper	**9.1**		4.0	1.9	ug/L		09/01/18 04:28	09/05/18 04:50	2
Manganese	**71.2**		8.0	2.7	ug/L		09/01/18 04:28	09/05/18 04:50	2
Nickel	**3.7**	**J**	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 04:50	2
Lead	**3.1**		1.2	0.37	ug/L		09/01/18 04:28	09/05/18 04:50	2
Antimony	**0.84**	**J**	2.0	0.62	ug/L		09/01/18 04:28	09/05/18 04:50	2
Selenium	0.69	U	10.0	0.69	ug/L		09/01/18 04:28	09/05/18 04:50	2
Vanadium	**2.6**	**J**	4.0	1.2	ug/L		09/01/18 04:28	09/05/18 04:50	2
Zinc	**63.2**		16.0	5.4	ug/L		09/01/18 04:28	09/05/18 04:50	2
Aluminum	**1460**		40.0	15.0	ug/L		09/01/18 04:28	09/05/18 04:50	2
Sodium	**76100**		200	75.7	ug/L		09/01/18 04:28	09/05/18 04:50	2
Magnesium	**915**		200	65.7	ug/L		09/01/18 04:28	09/05/18 04:50	2

Client Sample ID: RW-5-082418

Date Collected: 08/24/18 11:55
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-24

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**99100**		200	64.9	ug/L		09/01/18 04:28	09/05/18 04:50	2
Calcium	**9560**		200	67.6	ug/L		09/01/18 04:28	09/05/18 04:50	2
Iron	**1990**		120	45.7	ug/L		09/01/18 04:28	09/05/18 04:50	2
Thallium	0.24	U	0.80	0.24	ug/L		09/01/18 04:28	09/05/18 04:50	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 01:10	09/14/18 01:58	2
Arsenic	**16.9**		2.0	0.77	ug/L		09/14/18 01:10	09/14/18 01:58	2
Barium	**7.1**		4.0	1.1	ug/L		09/14/18 01:10	09/14/18 01:58	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 01:10	09/14/18 01:58	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 01:10	09/14/18 01:58	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 01:10	09/14/18 01:58	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 01:10	09/14/18 01:58	2
Copper	**4.4**		4.0	1.9	ug/L		09/14/18 01:10	09/14/18 01:58	2
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 01:10	09/14/18 01:58	2
Nickel	**2.9**	**J**	4.0	1.3	ug/L		09/14/18 01:10	09/14/18 01:58	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 01:10	09/14/18 01:58	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 01:10	09/14/18 01:58	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 01:10	09/14/18 01:58	2
Vanadium	**2.2**	**J**	4.0	1.2	ug/L		09/14/18 01:10	09/14/18 01:58	2
Zinc	**44.9**		16.0	5.4	ug/L		09/14/18 01:10	09/14/18 01:58	2
Aluminum	**296**		40.0	15.0	ug/L		09/14/18 01:10	09/14/18 01:58	2
Sodium	**71600**		200	75.7	ug/L		08/30/18 13:04	08/31/18 11:13	2
Magnesium	65.7	U	200	65.7	ug/L		09/14/18 01:10	09/14/18 01:58	2
Potassium	**104000**		200	64.9	ug/L		08/30/18 13:04	08/31/18 11:13	2
Calcium	**7520**		200	67.6	ug/L		09/14/18 01:10	09/14/18 01:58	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 01:10	09/14/18 01:58	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 01:10	09/14/18 01:58	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:41	08/29/18 15:48	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:22	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/26/18 13:31	1
Alkalinity	**288**		5.0	5.0	mg/L			08/26/18 13:31	1

Surrogate Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
460-163302-2	OB-20A-082318	125	95	112	97
460-163302-6	OB-30C-082318	118	95	108	97
460-163302-10	SC-02-082318	113	93	105	101
460-163302-11	OB-5-082318	115	96	108	101
460-163302-12	Dup-02-082318	113	87	107	97
460-163302-13	OB-12-082318	115	93	107	97
460-163302-14	OB-2-082318	112	96	105	97
460-163302-15	TB-03-082418	114	100	107	101
460-163302-16	RW-13 (71-91)-082418	118	96	111	97
460-163302-17	OB-30A-082418	114	94	110	96
460-163302-18	Dup-03-082418	114	95	107	98
460-163302-19	PMS-50-082418	123	91	113	96
460-163302-20	PMS-180-082418	119	96	111	97
460-163302-21	PMS-230-082418	117	100	110	98
460-163302-21 MS	PMS-230-082418	111	98	103	97
460-163302-21 MSD	PMS-230-082418	111	98	101	100
460-163302-23	FB-03-082418	116	96	110	101
460-163302-24	RW-5-082418	122	92	116	91
LCS 460-548123/4	Lab Control Sample	116	100	102	99
LCS 460-548231/4	Lab Control Sample	111	102	104	96
MB 460-548123/8	Method Blank	115	93	106	99
MB 460-548231/8	Method Blank	114	97	104	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(70-130)
460-163302-2	OB-20A-082318	107
460-163302-6	OB-30C-082318	112
460-163302-10	SC-02-082318	107
460-163302-11	OB-5-082318	85
460-163302-12	Dup-02-082318	106
460-163302-13	OB-12-082318	96
460-163302-14	OB-2-082318	106
460-163302-15	TB-03-082418	124
460-163302-16	RW-13 (71-91)-082418	120
460-163302-17	OB-30A-082418	108
460-163302-18	Dup-03-082418	100
460-163302-19	PMS-50-082418	99
460-163302-20	PMS-180-082418	98
460-163302-21	PMS-230-082418	95

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB (70-130)
460-163302-21 MS	PMS-230-082418	107
460-163302-21 MSD	PMS-230-082418	103
460-163302-23	FB-03-082418	112
460-163302-24	RW-5-082418	110
LCS 460-548540/3	Lab Control Sample	110
LCS 460-548858/4	Lab Control Sample	96
LCSD 460-548858/22	Lab Control Sample Dup	100
MB 460-548540/7	Method Blank	108
MB 460-548858/8	Method Blank	94

Surrogate Legend

BFB = 4-Bromofluorobenzene

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	NBZ (30-130)	PHL (15-110)	TPHL (30-130)	TBP (15-110)	2FP (15-110)	FBP (30-130)
460-163112-E-9-B MS	Matrix Spike	84	23	87	104	35	83
460-163112-E-9-C MSD	Matrix Spike Duplicate	99	27	96	113 X	40	95
460-163302-1	OB-20B-082318	100	34	86	112 X	53	85
460-163302-2	OB-20A-082318	97	35	88	104	52	80
460-163302-3	RW-6-082318	94	31	82	103	47	82
460-163302-4	RW-6A-082318	96	31	84	102	48	80
460-163302-5	CMS-50-082318	103	35	103	111 X	53	92
460-163302-5 MS	CMS-50-082318	102	34	104	115 X	52	92
460-163302-5 MSD	CMS-50-082318	99	35	101	115 X	53	90
460-163302-6	OB-30C-082318	99	33	91	103	49	84
460-163302-7	CMS-100-082318	98	31	84	103	48	83
460-163302-8	CMS-160-082318	94	32	83	102	48	78
460-163302-9	CMS-275-082318	97	32	88	107	49	84
460-163302-10	SC-02-082318	96	33	99	104	50	83
460-163302-11	OB-5-082318	89	28	96	97	41	87
460-163302-12	Dup-02-082318	89	24	94	88	37	85
460-163302-13	OB-12-082318	87	24	94	84	37	86
460-163302-14	OB-2-082318	84	24	90	85	37	81
460-163302-16	RW-13 (71-91)-082418	87	24	95	90	37	82
460-163302-17	OB-30A-082418	77	21	85	80	32	74
460-163302-18	Dup-03-082418	84	23	93	85	35	80
460-163302-19	PMS-50-082418	90	22	95	88	35	87
460-163302-20	PMS-180-082418	82	23	89	94	36	83
460-163302-21	PMS-230-082418	86	31	88	100	47	88
460-163302-21 MS	PMS-230-082418	77	28	83	94	43	84
460-163302-21 MSD	PMS-230-082418	79	29	89	97	44	87
460-163302-22	SC-01-082418	81	22	87	82	34	80
460-163302-23	FB-03-082418	88	23	94	86	37	85
460-163302-24	RW-5-082418	84	28	84	85	42	84
LCS 460-547574/2-A	Lab Control Sample	101	40	107	114 X	58	97

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	PHL	TPHL	TBP	2FP	FBP
Lab Sample ID	Client Sample ID	(30-130)	(15-110)	(30-130)	(15-110)	(15-110)	(30-130)
LCS 460-547574/3-A	Lab Control Sample	102	44	104	104	61	90
LCS 460-547599/2-A	Lab Control Sample	94	24	92	111 X	37	84
LCS 460-547599/3-A	Lab Control Sample	91	24	96	105	37	79
LCS 460-548149/2-A	Lab Control Sample	98	35	100	112 X	52	100
LCS 460-548149/3-A	Lab Control Sample	99	32	103	106	48	95
MB 460-547574/1-A	Method Blank	95	37	95	98	53	83
MB 460-547599/1-A	Method Blank	78	20	83	87	32	66
MB 460-548149/1-A	Method Blank	98	32	97	103	48	94

Surrogate Legend

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

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCBP1	DCBP2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
460-163302-1	OB-20B-082318	73	61	84	67
460-163302-2	OB-20A-082318	78	77	53	50
460-163302-3	RW-6-082318	72	70	56	59
460-163302-4	RW-6A-082318	71	69	71	73
460-163302-5	CMS-50-082318	86	84	91	84
460-163302-5 MS	CMS-50-082318	73	71	77	69
460-163302-5 MSD	CMS-50-082318	75	73	67	61
460-163302-6	OB-30C-082318	77	76	86	80
460-163302-7	CMS-100-082318	73	64	74	64
460-163302-8	CMS-160-082318	81	80	84	82
460-163302-9	CMS-275-082318	78	78	72	68
460-163302-10	SC-02-082318	71	79	83	89
460-163302-11	OB-5-082318	81	80	84	81
460-163302-12	Dup-02-082318	69	70	74	73
460-163302-13	OB-12-082318	67	69	69	68
460-163302-14	OB-2-082318	75	77	82	80
460-163302-16	RW-13 (71-91)-082418	73	75	95	93
460-163302-17	OB-30A-082418	55	54	74	69
460-163302-18	Dup-03-082418	63	76	87	99
460-163302-19	PMS-50-082418	76	75	50	48
460-163302-20	PMS-180-082418	70	79	50	58
460-163302-21	PMS-230-082418	65	65	37	38
460-163302-21 MS	PMS-230-082418	62	67	32	34
460-163302-21 MSD	PMS-230-082418	66	67	38	37
460-163302-22	SC-01-082418	70	58	52	43
460-163302-23	FB-03-082418	83	85	37	36

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	TCX1 (30-150)	TCX2 (30-150)	DCBP1 (30-150)	DCBP2 (30-150)
460-163302-24	RW-5-082418	61	60	52	54
460-163352-M-6-A MSD	Matrix Spike Duplicate	61	50	33	30
460-163352-O-6-B MS	Matrix Spike	58	50	44	36
LCS 460-547718/2-A	Lab Control Sample	69	72	86	84
LCS 460-548017/2-A	Lab Control Sample	91	92	107	102
LCS 460-548315/2-A	Lab Control Sample	90	91	105	100
MB 460-547718/1-A	Method Blank	80	63	98	69
MB 460-548017/1-A	Method Blank	86	86	101	95
MB 460-548315/1-A	Method Blank	88	86	103	95

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Isotope Dilution Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DXE (10-150)								
460-163302-1	OB-20B-082318	37								
460-163302-2	OB-20A-082318	35								
460-163302-3	RW-6-082318	36								
460-163302-4	RW-6A-082318	33								
460-163302-5	CMS-50-082318	30								
460-163302-5 MS	CMS-50-082318	31								
460-163302-5 MSD	CMS-50-082318	30								
460-163302-6	OB-30C-082318	38								
460-163302-7	CMS-100-082318	35								
460-163302-8	CMS-160-082318	36								
460-163302-9	CMS-275-082318	36								
460-163302-10	SC-02-082318	37								
460-163302-11	OB-5-082318	36								
460-163302-12	Dup-02-082318	34								
460-163302-13	OB-12-082318	38								
460-163302-14	OB-2-082318	35								
460-163302-16	RW-13 (71-91)-082418	36								
460-163302-17	OB-30A-082418	39								
460-163302-18	Dup-03-082418	34								
460-163302-19	PMS-50-082418	37								
460-163302-20	PMS-180-082418	36								
460-163302-21	PMS-230-082418	10								
460-163302-21 MS	PMS-230-082418	19								
460-163302-21 MSD	PMS-230-082418	17								
460-163302-22	SC-01-082418	34								
460-163302-23	FB-03-082418	30								
460-163302-24	RW-5-082418	32								
460-163313-A-2-A MS	Matrix Spike	23								
460-163313-B-2-A MSD	Matrix Spike Duplicate	32								
MB 460-547674/1-A	Method Blank	45								
MB 460-547677/1-A	Method Blank	42								

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DXE (10-200)								
LCS 460-547674/2-A	Lab Control Sample	39								
LCS 460-547677/2-A	Lab Control Sample	41								

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-548123/8
Matrix: Water
Analysis Batch: 548123

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/28/18 20:01	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/28/18 20:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/28/18 20:01	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/28/18 20:01	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/28/18 20:01	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/28/18 20:01	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/28/18 20:01	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/28/18 20:01	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/28/18 20:01	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/28/18 20:01	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/28/18 20:01	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/28/18 20:01	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/28/18 20:01	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/28/18 20:01	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/28/18 20:01	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/28/18 20:01	1
Acetone	5.0	U	5.0	5.0	ug/L			08/28/18 20:01	1
Benzene	0.43	U	1.0	0.43	ug/L			08/28/18 20:01	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/28/18 20:01	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/28/18 20:01	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/28/18 20:01	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/28/18 20:01	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/28/18 20:01	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/28/18 20:01	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/28/18 20:01	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/28/18 20:01	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/28/18 20:01	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/28/18 20:01	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/28/18 20:01	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/28/18 20:01	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/28/18 20:01	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/28/18 20:01	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/28/18 20:01	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/28/18 20:01	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/28/18 20:01	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/28/18 20:01	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/28/18 20:01	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/28/18 20:01	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/28/18 20:01	1
Styrene	0.42	U	1.0	0.42	ug/L			08/28/18 20:01	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/28/18 20:01	1
Toluene	0.38	U	1.0	0.38	ug/L			08/28/18 20:01	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/28/18 20:01	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/28/18 20:01	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/28/18 20:01	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/28/18 20:01	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/28/18 20:01	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/28/18 20:01	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/28/18 20:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		70 - 130		08/28/18 20:01	1
4-Bromofluorobenzene	93		70 - 130		08/28/18 20:01	1
Dibromofluoromethane (Surr)	106		70 - 130		08/28/18 20:01	1
Toluene-d8 (Surr)	99		70 - 130		08/28/18 20:01	1

Lab Sample ID: LCS 460-548123/4
Matrix: Water
Analysis Batch: 548123

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.6		ug/L		103	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.9		ug/L		110	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	17.1		ug/L		85	70 - 130
1,1,2-Trichloroethane	20.0	19.3		ug/L		97	70 - 130
1,1-Dichloroethane	20.0	20.0		ug/L		100	70 - 130
1,1-Dichloroethene	20.0	19.1		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	20.0	20.1		ug/L		100	70 - 130
1,2,4-Trichlorobenzene	20.0	19.6		ug/L		98	70 - 130
1,2-Dichlorobenzene	20.0	19.2		ug/L		96	70 - 130
1,2-Dichloroethane	20.0	19.6		ug/L		98	70 - 130
1,2-Dichloropropane	20.0	19.3		ug/L		96	70 - 130
1,3-Dichlorobenzene	20.0	19.9		ug/L		99	70 - 130
1,4-Dichlorobenzene	20.0	19.9		ug/L		99	70 - 130
2-Butanone (MEK)	100	83.6		ug/L		84	40 - 160
2-Hexanone	100	86.3		ug/L		86	40 - 160
4-Methyl-2-pentanone (MIBK)	100	89.1		ug/L		89	40 - 160
Acetone	100	85.1		ug/L		85	40 - 160
Benzene	20.0	20.0		ug/L		100	70 - 130
Bromoform	20.0	19.6		ug/L		98	70 - 130
Bromomethane	20.0	20.6		ug/L		103	40 - 160
Carbon disulfide	20.0	17.6		ug/L		88	40 - 160
Carbon tetrachloride	20.0	20.8		ug/L		104	70 - 130
Chlorobenzene	20.0	18.8		ug/L		94	70 - 130
Chlorobromomethane	20.0	19.4		ug/L		97	70 - 130
Chlorodibromomethane	20.0	20.2		ug/L		101	70 - 130
Chloroethane	20.0	21.6		ug/L		108	40 - 160
Chloroform	20.0	20.2		ug/L		101	70 - 130
Chloromethane	20.0	20.4		ug/L		102	40 - 160
cis-1,2-Dichloroethene	20.0	19.8		ug/L		99	70 - 130
cis-1,3-Dichloropropene	20.0	18.9		ug/L		95	70 - 130
Cyclohexane	20.0	18.0		ug/L		90	70 - 130
Dichlorobromomethane	20.0	21.0		ug/L		105	70 - 130
Dichlorodifluoromethane	20.0	18.1		ug/L		90	40 - 160
Ethylbenzene	20.0	19.0		ug/L		95	70 - 130
Isopropylbenzene	20.0	20.4		ug/L		102	70 - 130
Methyl acetate	40.0	43.3		ug/L		108	70 - 130
Methyl tert-butyl ether	20.0	20.5		ug/L		102	70 - 130
Methylcyclohexane	20.0	18.3		ug/L		92	70 - 130
Methylene Chloride	20.0	19.9		ug/L		100	70 - 130

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

Lab Sample ID: LCS 460-548123/4
Matrix: Water
Analysis Batch: 548123

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	20.0	19.7		ug/L		99	70 - 130
Tetrachloroethene	20.0	18.5		ug/L		92	70 - 130
Toluene	20.0	19.5		ug/L		98	70 - 130
trans-1,2-Dichloroethene	20.0	19.9		ug/L		100	70 - 130
trans-1,3-Dichloropropene	20.0	19.6		ug/L		98	70 - 130
Trichloroethene	20.0	18.9		ug/L		95	70 - 130
Trichlorofluoromethane	20.0	21.1		ug/L		106	40 - 160
Vinyl chloride	20.0	20.2		ug/L		101	70 - 130
Xylenes, Total	40.0	38.7		ug/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 460-548231/8
Matrix: Water
Analysis Batch: 548231

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/29/18 08:57	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/29/18 08:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/29/18 08:57	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 08:57	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/29/18 08:57	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/29/18 08:57	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/29/18 08:57	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/29/18 08:57	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/29/18 08:57	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/29/18 08:57	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/29/18 08:57	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/29/18 08:57	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/29/18 08:57	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/29/18 08:57	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/29/18 08:57	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/29/18 08:57	1
Acetone	5.0	U	5.0	5.0	ug/L			08/29/18 08:57	1
Benzene	0.43	U	1.0	0.43	ug/L			08/29/18 08:57	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/29/18 08:57	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/29/18 08:57	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/29/18 08:57	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/29/18 08:57	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/29/18 08:57	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/29/18 08:57	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/29/18 08:57	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/29/18 08:57	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/29/18 08:57	1

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

Lab Sample ID: MB 460-548231/8
Matrix: Water
Analysis Batch: 548231

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.14	U	1.0	0.14	ug/L			08/29/18 08:57	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/29/18 08:57	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/29/18 08:57	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/29/18 08:57	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/29/18 08:57	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/29/18 08:57	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/29/18 08:57	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/29/18 08:57	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/29/18 08:57	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/29/18 08:57	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/29/18 08:57	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/29/18 08:57	1
Styrene	0.42	U	1.0	0.42	ug/L			08/29/18 08:57	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/29/18 08:57	1
Toluene	0.38	U	1.0	0.38	ug/L			08/29/18 08:57	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/29/18 08:57	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/29/18 08:57	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/29/18 08:57	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/29/18 08:57	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/29/18 08:57	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/29/18 08:57	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/18 08:57*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*08/29/18 08:57*	*1*
4-Bromofluorobenzene	*97*		*70 - 130*		*08/29/18 08:57*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/29/18 08:57*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/29/18 08:57*	*1*

Lab Sample ID: LCS 460-548231/4
Matrix: Water
Analysis Batch: 548231

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	21.7		ug/L		109	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.3		ug/L		106	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.6		ug/L		103	70 - 130
1,1,2-Trichloroethane	20.0	19.5		ug/L		98	70 - 130
1,1-Dichloroethane	20.0	21.5		ug/L		107	70 - 130
1,1-Dichloroethene	20.0	20.4		ug/L		102	70 - 130
1,2,3-Trichlorobenzene	20.0	19.9		ug/L		100	70 - 130
1,2,4-Trichlorobenzene	20.0	20.8		ug/L		104	70 - 130
1,2-Dichlorobenzene	20.0	20.6		ug/L		103	70 - 130
1,2-Dichloroethane	20.0	20.2		ug/L		101	70 - 130
1,2-Dichloropropane	20.0	19.5		ug/L		98	70 - 130

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

Lab Sample ID: LCS 460-548231/4
Matrix: Water
Analysis Batch: 548231

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	20.0	20.9		ug/L		104	70 - 130
1,4-Dichlorobenzene	20.0	20.6		ug/L		103	70 - 130
2-Butanone (MEK)	100	87.7		ug/L		88	40 - 160
2-Hexanone	100	93.0		ug/L		93	40 - 160
4-Methyl-2-pentanone (MIBK)	100	97.9		ug/L		98	40 - 160
Acetone	100	94.6		ug/L		95	40 - 160
Benzene	20.0	20.2		ug/L		101	70 - 130
Bromoform	20.0	19.9		ug/L		99	70 - 130
Bromomethane	20.0	19.3		ug/L		97	40 - 160
Carbon disulfide	20.0	20.7		ug/L		103	40 - 160
Carbon tetrachloride	20.0	22.3		ug/L		112	70 - 130
Chlorobenzene	20.0	19.1		ug/L		96	70 - 130
Chlorobromomethane	20.0	20.1		ug/L		101	70 - 130
Chlorodibromomethane	20.0	20.0		ug/L		100	70 - 130
Chloroethane	20.0	19.6		ug/L		98	40 - 160
Chloroform	20.0	20.9		ug/L		104	70 - 130
Chloromethane	20.0	19.9		ug/L		99	40 - 160
cis-1,2-Dichloroethene	20.0	20.6		ug/L		103	70 - 130
cis-1,3-Dichloropropene	20.0	18.6		ug/L		93	70 - 130
Cyclohexane	20.0	20.9		ug/L		104	70 - 130
Dichlorobromomethane	20.0	20.9		ug/L		104	70 - 130
Dichlorodifluoromethane	20.0	18.7		ug/L		93	40 - 160
Ethylbenzene	20.0	19.7		ug/L		98	70 - 130
Isopropylbenzene	20.0	20.9		ug/L		104	70 - 130
Methyl acetate	40.0	42.0		ug/L		105	70 - 130
Methyl tert-butyl ether	20.0	20.1		ug/L		100	70 - 130
Methylcyclohexane	20.0	21.0		ug/L		105	70 - 130
Methylene Chloride	20.0	20.3		ug/L		102	70 - 130
Styrene	20.0	20.5		ug/L		102	70 - 130
Tetrachloroethene	20.0	18.9		ug/L		94	70 - 130
Toluene	20.0	19.6		ug/L		98	70 - 130
trans-1,2-Dichloroethene	20.0	21.4		ug/L		107	70 - 130
trans-1,3-Dichloropropene	20.0	19.1		ug/L		95	70 - 130
Trichloroethene	20.0	19.4		ug/L		97	70 - 130
Trichlorofluoromethane	20.0	20.9		ug/L		104	40 - 160
Vinyl chloride	20.0	18.8		ug/L		94	70 - 130
Xylenes, Total	40.0	39.4		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*
4-Bromofluorobenzene	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

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

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 548231

Client Sample ID: PMS-230-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.24	U	20.0	22.3		ug/L		112	70 - 130
1,1,2,2-Tetrachloroethane	0.37	U	20.0	23.5		ug/L		117	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	19.5		ug/L		98	70 - 130
1,1,2-Trichloroethane	0.43	U	20.0	20.2		ug/L		101	70 - 130
1,1-Dichloroethane	0.26	U	20.0	21.1		ug/L		105	70 - 130
1,1-Dichloroethene	0.12	U	20.0	20.7		ug/L		104	70 - 130
1,2,3-Trichlorobenzene	0.36	U	20.0	20.5		ug/L		102	70 - 130
1,2,4-Trichlorobenzene	0.37	U	20.0	21.0		ug/L		105	70 - 130
1,2-Dichlorobenzene	0.90	J	20.0	21.6		ug/L		104	70 - 130
1,2-Dichloroethane	0.43	U	20.0	21.7		ug/L		109	70 - 130
1,2-Dichloropropane	0.35	U	20.0	20.2		ug/L		101	70 - 130
1,3-Dichlorobenzene	3.2		20.0	23.5		ug/L		102	70 - 130
1,4-Dichlorobenzene	8.4		20.0	28.1		ug/L		98	70 - 130
2-Butanone (MEK)	1.9	U	100	92.8		ug/L		93	40 - 160
2-Hexanone	2.9	U	100	100		ug/L		100	40 - 160
4-Methyl-2-pentanone (MIBK)	2.7	U	100	106		ug/L		106	40 - 160
Acetone	5.0	U	100	101		ug/L		101	40 - 160
Benzene	33		20.0	48.9		ug/L		78	70 - 130
Bromoform	0.54	U	20.0	20.0		ug/L		100	70 - 130
Bromomethane	1.0	U	20.0	20.4		ug/L		102	40 - 160
Carbon disulfide	0.16	U	20.0	20.8		ug/L		104	40 - 160
Carbon tetrachloride	0.21	U	20.0	22.6		ug/L		113	70 - 130
Chlorobenzene	21		20.0	37.2		ug/L		80	70 - 130
Chlorobromomethane	0.41	U	20.0	20.8		ug/L		104	70 - 130
Chlorodibromomethane	0.28	U	20.0	20.0		ug/L		100	70 - 130
Chloroethane	8.6		20.0	26.4		ug/L		89	40 - 160
Chloroform	0.33	U	20.0	21.3		ug/L		107	70 - 130
Chloromethane	0.14	U	20.0	20.7		ug/L		103	40 - 160
cis-1,2-Dichloroethene	0.22	U	20.0	21.3		ug/L		106	70 - 130
cis-1,3-Dichloropropene	0.46	U	20.0	19.0		ug/L		95	70 - 130
Cyclohexane	2.9		20.0	23.0		ug/L		100	70 - 130
Dichlorobromomethane	0.34	U	20.0	21.6		ug/L		108	70 - 130
Dichlorodifluoromethane	0.12	U	20.0	17.7		ug/L		89	40 - 160
Ethylbenzene	0.30	U	20.0	20.3		ug/L		102	70 - 130
Isopropylbenzene	14		20.0	34.4		ug/L		103	70 - 130
Methyl acetate	0.31	U	40.0	48.2		ug/L		120	70 - 130
Methyl tert-butyl ether	0.47	U	20.0	21.4		ug/L		107	70 - 130
Methylcyclohexane	0.68	J	20.0	21.1		ug/L		102	70 - 130
Methylene Chloride	0.32	U	20.0	21.6		ug/L		108	70 - 130
Styrene	0.42	U	20.0	20.1		ug/L		101	70 - 130
Tetrachloroethene	0.25	U	20.0	20.0		ug/L		100	70 - 130
Toluene	0.43	J	20.0	21.4		ug/L		105	70 - 130
trans-1,2-Dichloroethene	0.24	U	20.0	20.8		ug/L		104	70 - 130
trans-1,3-Dichloropropene	0.49	U	20.0	19.0		ug/L		95	70 - 130
Trichloroethene	0.31	U	20.0	20.6		ug/L		103	70 - 130
Trichlorofluoromethane	0.14	U	20.0	21.9		ug/L		110	40 - 160
Vinyl chloride	0.17	U	20.0	19.6		ug/L		98	70 - 130

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

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 548231

Client Sample ID: PMS-230-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	1.1	J	40.0	42.0		ug/L		102	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*
4-Bromofluorobenzene	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: 460-163302-21 MSD
Matrix: Water
Analysis Batch: 548231

Client Sample ID: PMS-230-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.24	U	20.0	22.6		ug/L		113	70 - 130	1	20
1,1,2,2-Tetrachloroethane	0.37	U	20.0	24.7		ug/L		124	70 - 130	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	19.0		ug/L		95	70 - 130	3	20
1,1,2-Trichloroethane	0.43	U	20.0	20.5		ug/L		102	70 - 130	1	20
1,1-Dichloroethane	0.26	U	20.0	21.9		ug/L		109	70 - 130	4	20
1,1-Dichloroethene	0.12	U	20.0	21.1		ug/L		106	70 - 130	2	20
1,2,3-Trichlorobenzene	0.36	U	20.0	22.5		ug/L		113	70 - 130	10	20
1,2,4-Trichlorobenzene	0.37	U	20.0	21.6		ug/L		108	70 - 130	3	20
1,2-Dichlorobenzene	0.90	J	20.0	22.1		ug/L		106	70 - 130	2	20
1,2-Dichloroethane	0.43	U	20.0	21.8		ug/L		109	70 - 130	0	20
1,2-Dichloropropane	0.35	U	20.0	20.2		ug/L		101	70 - 130	0	20
1,3-Dichlorobenzene	3.2		20.0	24.8		ug/L		108	70 - 130	5	20
1,4-Dichlorobenzene	8.4		20.0	28.3		ug/L		99	70 - 130	1	20
2-Butanone (MEK)	1.9	U	100	96.0		ug/L		96	40 - 160	3	20
2-Hexanone	2.9	U	100	101		ug/L		101	40 - 160	1	20
4-Methyl-2-pentanone (MIBK)	2.7	U	100	105		ug/L		105	40 - 160	1	20
Acetone	5.0	U	100	104		ug/L		104	40 - 160	4	20
Benzene	33		20.0	50.3		ug/L		85	70 - 130	3	20
Bromoform	0.54	U	20.0	19.8		ug/L		99	70 - 130	1	20
Bromomethane	1.0	U	20.0	21.2		ug/L		106	40 - 160	4	20
Carbon disulfide	0.16	U	20.0	19.5		ug/L		98	40 - 160	6	20
Carbon tetrachloride	0.21	U	20.0	23.1		ug/L		115	70 - 130	2	20
Chlorobenzene	21		20.0	39.2		ug/L		90	70 - 130	5	20
Chlorobromomethane	0.41	U	20.0	20.5		ug/L		102	70 - 130	1	20
Chlorodibromomethane	0.28	U	20.0	20.3		ug/L		101	70 - 130	1	20
Chloroethane	8.6		20.0	27.9		ug/L		97	40 - 160	6	20
Chloroform	0.33	U	20.0	21.3		ug/L		107	70 - 130	0	20
Chloromethane	0.14	U	20.0	20.5		ug/L		103	40 - 160	1	20
cis-1,2-Dichloroethene	0.22	U	20.0	21.5		ug/L		107	70 - 130	1	20
cis-1,3-Dichloropropene	0.46	U	20.0	19.3		ug/L		97	70 - 130	2	20
Cyclohexane	2.9		20.0	22.6		ug/L		99	70 - 130	1	20
Dichlorobromomethane	0.34	U	20.0	21.2		ug/L		106	70 - 130	2	20
Dichlorodifluoromethane	0.12	U	20.0	18.4		ug/L		92	40 - 160	4	20
Ethylbenzene	0.30	U	20.0	20.4		ug/L		102	70 - 130	0	20

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

Lab Sample ID: 460-163302-21 MSD
Matrix: Water
Analysis Batch: 548231

Client Sample ID: PMS-230-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Isopropylbenzene	14		20.0	35.4		ug/L		108	70 - 130	3	20
Methyl acetate	0.31	U	40.0	49.3		ug/L		123	70 - 130	2	20
Methyl tert-butyl ether	0.47	U	20.0	21.2		ug/L		106	70 - 130	1	20
Methylcyclohexane	0.68	J	20.0	20.9		ug/L		101	70 - 130	1	20
Methylene Chloride	0.32	U	20.0	21.3		ug/L		106	70 - 130	2	20
Styrene	0.42	U	20.0	20.4		ug/L		102	70 - 130	1	20
Tetrachloroethene	0.25	U	20.0	20.1		ug/L		101	70 - 130	1	20
Toluene	0.43	J	20.0	21.3		ug/L		105	70 - 130	0	20
trans-1,2-Dichloroethene	0.24	U	20.0	20.9		ug/L		105	70 - 130	1	20
trans-1,3-Dichloropropene	0.49	U	20.0	20.0		ug/L		100	70 - 130	5	20
Trichloroethene	0.31	U	20.0	20.6		ug/L		103	70 - 130	0	20
Trichlorofluoromethane	0.14	U	20.0	21.7		ug/L		108	40 - 160	1	20
Vinyl chloride	0.17	U	20.0	20.6		ug/L		103	70 - 130	5	20
Xylenes, Total	1.1	J	40.0	41.4		ug/L		101	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*
4-Bromofluorobenzene	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 460-548540/7
Matrix: Water
Analysis Batch: 548540

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/30/18 10:31	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/30/18 10:31	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/30/18 10:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*70 - 130*		*08/30/18 10:31*	*1*

Lab Sample ID: LCS 460-548540/3
Matrix: Water
Analysis Batch: 548540

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.0500	0.0679		ug/L		136	40 - 160		
Ethylene Dibromide			0.0500	0.0462		ug/L		92	70 - 130		
1,2,3-Trichloropropane			0.0500	0.0651		ug/L		130	40 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*110*		*70 - 130*

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

Lab Sample ID: MB 460-548858/8
Matrix: Water
Analysis Batch: 548858

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			08/31/18 09:58	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			08/31/18 09:58	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			08/31/18 09:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*08/31/18 09:58*	*1*

Lab Sample ID: LCS 460-548858/4
Matrix: Water
Analysis Batch: 548858

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.0500	0.0576		ug/L		115	40 - 160		
Ethylene Dibromide			0.0500	0.0437		ug/L		87	70 - 130		
1,2,3-Trichloropropane			0.0500	0.0575		ug/L		115	40 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*70 - 130*

Lab Sample ID: LCSD 460-548858/22
Matrix: Water
Analysis Batch: 548858

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.0500	0.0518		ug/L		104	40 - 160	11	20
Ethylene Dibromide			0.0500	0.0493		ug/L		99	70 - 130	12	20
1,2,3-Trichloropropane			0.0500	0.0584		ug/L		117	40 - 160	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*70 - 130*

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 548858

Client Sample ID: PMS-230-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane	0.0040	U	0.0500	0.0563		ug/L		113	40 - 160		
Ethylene Dibromide	0.0010	U	0.0500	0.0527		ug/L		105	70 - 130		
1,2,3-Trichloropropane	0.0030	U	0.0500	0.0715		ug/L		143	40 - 160		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*70 - 130*

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

Lab Sample ID: 460-163302-21 MSD
Matrix: Water
Analysis Batch: 548858

Client Sample ID: PMS-230-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.0040	U	0.0500	0.0566		ug/L		113	40 - 160	1	20
Ethylene Dibromide	0.0010	U	0.0500	0.0544		ug/L		109	70 - 130	3	20
1,2,3-Trichloropropane	0.0030	U	0.0500	0.0789		ug/L		158	40 - 160	10	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*70 - 130*

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

Lab Sample ID: MB 460-547574/1-A
Matrix: Water
Analysis Batch: 547615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 16:46	08/26/18 23:16	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 16:46	08/26/18 23:16	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/26/18 16:46	08/26/18 23:16	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/26/18 23:16	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/26/18 23:16	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/26/18 23:16	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 16:46	08/26/18 23:16	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/26/18 23:16	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 16:46	08/26/18 23:16	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 16:46	08/26/18 23:16	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 16:46	08/26/18 23:16	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 16:46	08/26/18 23:16	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 16:46	08/26/18 23:16	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		08/26/18 16:46	08/26/18 23:16	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		08/26/18 16:46	08/26/18 23:16	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 16:46	08/26/18 23:16	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 16:46	08/26/18 23:16	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 16:46	08/26/18 23:16	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 16:46	08/26/18 23:16	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/26/18 23:16	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 16:46	08/26/18 23:16	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/26/18 16:46	08/26/18 23:16	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/26/18 23:16	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 16:46	08/26/18 23:16	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/26/18 23:16	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 16:46	08/26/18 23:16	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 16:46	08/26/18 23:16	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 16:46	08/26/18 23:16	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 16:46	08/26/18 23:16	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 16:46	08/26/18 23:16	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/26/18 23:16	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 16:46	08/26/18 23:16	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 16:46	08/26/18 23:16	1

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

Lab Sample ID: MB 460-547574/1-A
Matrix: Water
Analysis Batch: 547615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 16:46	08/26/18 23:16	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 16:46	08/26/18 23:16	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 16:46	08/26/18 23:16	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 16:46	08/26/18 23:16	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 16:46	08/26/18 23:16	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/26/18 23:16	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		08/26/18 16:46	08/26/18 23:16	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 16:46	08/26/18 23:16	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/26/18 23:16	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/26/18 23:16	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/26/18 23:16	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 16:46	08/26/18 23:16	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 16:46	08/26/18 23:16	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 16:46	08/26/18 23:16	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		08/26/18 16:46	08/26/18 23:16	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 16:46	08/26/18 23:16	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 16:46	08/26/18 23:16	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 16:46	08/26/18 23:16	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		08/26/18 16:46	08/26/18 23:16	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 16:46	08/26/18 23:16	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		08/26/18 16:46	08/26/18 23:16	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		08/26/18 16:46	08/26/18 23:16	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		08/26/18 16:46	08/26/18 23:16	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/26/18 23:16	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/26/18 23:16	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 16:46	08/26/18 23:16	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 16:46	08/26/18 23:16	1
Caprolactam	0.68	U	10	0.68	ug/L		08/26/18 16:46	08/26/18 23:16	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 16:46	08/26/18 23:16	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 16:46	08/26/18 23:16	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 16:46	08/26/18 23:16	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 16:46	08/26/18 23:16	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 16:46	08/26/18 23:16	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 16:46	08/26/18 23:16	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 16:46*	*08/26/18 23:16*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*95*		*30 - 130*	*08/26/18 16:46*	*08/26/18 23:16*	*1*
Phenol-d5 (Surr)	*37*		*15 - 110*	*08/26/18 16:46*	*08/26/18 23:16*	*1*
Terphenyl-d14 (Surr)	*95*		*30 - 130*	*08/26/18 16:46*	*08/26/18 23:16*	*1*
2,4,6-Tribromophenol (Surr)	*98*		*15 - 110*	*08/26/18 16:46*	*08/26/18 23:16*	*1*
2-Fluorophenol (Surr)	*53*		*15 - 110*	*08/26/18 16:46*	*08/26/18 23:16*	*1*
2-Fluorobiphenyl	*83*		*30 - 130*	*08/26/18 16:46*	*08/26/18 23:16*	*1*

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

Lab Sample ID: LCS 460-547574/2-A
Matrix: Water
Analysis Batch: 547615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	80.0	31.7		ug/L		40	20 - 160
2-Chlorophenol	80.0	70.1		ug/L		88	70 - 130
2-Methylphenol	80.0	59.7		ug/L		75	70 - 130
4-Methylphenol	80.0	54.5		ug/L		68	20 - 160
2-Nitrophenol	80.0	81.6		ug/L		102	70 - 130
2,4-Dimethylphenol	80.0	72.6		ug/L		91	70 - 130
2,4-Dichlorophenol	80.0	75.7		ug/L		95	70 - 130
4-Chloro-3-methylphenol	80.0	72.8		ug/L		91	20 - 160
2,4,6-Trichlorophenol	80.0	77.3		ug/L		97	70 - 130
2,4,5-Trichlorophenol	80.0	75.3		ug/L		94	20 - 160
2,4-Dinitrotoluene	80.0	84.1		ug/L		105	70 - 130
4-Nitrophenol	160	61.1		ug/L		38	20 - 160
4,6-Dinitro-2-methylphenol	160	167		ug/L		105	20 - 160
Pentachlorophenol	160	148		ug/L		93	20 - 160
Bis(2-chloroethyl)ether	80.0	78.2		ug/L		98	70 - 130
N-Nitrosodi-n-propylamine	80.0	76.5		ug/L		96	70 - 130
Hexachloroethane	80.0	48.2		ug/L		60	20 - 160
Nitrobenzene	80.0	77.9		ug/L		97	70 - 130
Isophorone	80.0	80.4		ug/L		101	70 - 130
Naphthalene	80.0	65.6		ug/L		82	70 - 130
4-Chloroaniline	80.0	73.2		ug/L		92	20 - 160
Hexachlorobutadiene	80.0	53.7	*	ug/L		67	70 - 130
2-Methylnaphthalene	80.0	68.2		ug/L		85	70 - 130
Hexachlorocyclopentadiene	80.0	59.9		ug/L		75	20 - 160
2-Chloronaphthalene	80.0	69.9		ug/L		87	70 - 130
2-Nitroaniline	80.0	76.6		ug/L		96	20 - 160
Dimethyl phthalate	80.0	80.0		ug/L		100	70 - 130
Acenaphthylene	80.0	78.4		ug/L		98	70 - 130
2,6-Dinitrotoluene	80.0	82.7		ug/L		103	70 - 130
3-Nitroaniline	80.0	72.2		ug/L		90	20 - 160
Acenaphthene	80.0	67.8		ug/L		85	70 - 130
Dibenzofuran	80.0	75.5		ug/L		94	70 - 130
2,4-Dinitrophenol	160	144		ug/L		90	20 - 160
Diethyl phthalate	80.0	82.6		ug/L		103	70 - 130
4-Chlorophenyl phenyl ether	80.0	77.0		ug/L		96	70 - 130
Fluorene	80.0	76.6		ug/L		96	70 - 130
4-Nitroaniline	80.0	77.1		ug/L		96	20 - 160
N-Nitrosodiphenylamine	80.0	77.5		ug/L		97	70 - 130
4-Bromophenyl phenyl ether	80.0	79.0		ug/L		99	70 - 130
Hexachlorobenzene	80.0	77.7		ug/L		97	70 - 130
Phenanthrene	80.0	77.1		ug/L		96	70 - 130
Anthracene	80.0	76.7		ug/L		96	70 - 130
Carbazole	80.0	78.0		ug/L		97	70 - 130
Di-n-butyl phthalate	80.0	84.6		ug/L		106	70 - 130
Fluoranthene	80.0	79.5		ug/L		99	70 - 130
Pyrene	80.0	84.1		ug/L		105	70 - 130
Butyl benzyl phthalate	80.0	88.5		ug/L		111	70 - 130
Benzo[a]anthracene	80.0	80.9		ug/L		101	70 - 130

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

Lab Sample ID: LCS 460-547574/2-A
Matrix: Water
Analysis Batch: 547615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	80.0	78.2		ug/L		98	70 - 130
Bis(2-ethylhexyl) phthalate	80.0	86.4		ug/L		108	70 - 130
Di-n-octyl phthalate	80.0	91.3		ug/L		114	70 - 130
Benzo[b]fluoranthene	80.0	83.9		ug/L		105	70 - 130
Benzo[k]fluoranthene	80.0	84.5		ug/L		106	70 - 130
Benzo[a]pyrene	80.0	83.1		ug/L		104	70 - 130
Indeno[1,2,3-cd]pyrene	80.0	82.0		ug/L		102	70 - 130
Dibenz(a,h)anthracene	80.0	81.9		ug/L		102	70 - 130
Benzo[g,h,i]perylene	80.0	77.8		ug/L		97	70 - 130
1,1'-Biphenyl	80.0	69.5		ug/L		87	70 - 130
Acetophenone	80.0	77.1		ug/L		96	70 - 130
2,2'-oxybis[1-chloropropane]	80.0	73.1		ug/L		91	70 - 130
1,2,4,5-Tetrachlorobenzene	80.0	67.7		ug/L		85	70 - 130
2,3,4,6-Tetrachlorophenol	80.0	80.7		ug/L		101	70 - 130
3,3'-Dichlorobenzidine	80.0	78.6		ug/L		98	70 - 130
Bis(2-chloroethoxy)methane	80.0	81.2		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*101*		*30 - 130*
Phenol-d5 (Surr)	*40*		*15 - 110*
Terphenyl-d14 (Surr)	*107*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*114*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*58*		*15 - 110*
2-Fluorobiphenyl	*97*		*30 - 130*

Lab Sample ID: LCS 460-547574/3-A
Matrix: Water
Analysis Batch: 547615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	160	158		ug/L		99	20 - 160
Caprolactam	160	57.6		ug/L		36	20 - 160
Atrazine	160	185		ug/L		115	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*102*		*30 - 130*
Phenol-d5 (Surr)	*44*		*15 - 110*
Terphenyl-d14 (Surr)	*104*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*104*		*15 - 110*
2-Fluorophenol (Surr)	*61*		*15 - 110*
2-Fluorobiphenyl	*90*		*30 - 130*

Lab Sample ID: 460-163302-5 MS
Matrix: Water
Analysis Batch: 547615

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 547574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	0.29	U	80.0	27.4		ug/L		34	20 - 160

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

Lab Sample ID: 460-163302-5 MS | **Client Sample ID: CMS-50-082318**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 547615 | **Prep Batch: 547574**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorophenol	0.38	U	80.0	67.4		ug/L		84	70 - 130
2-Methylphenol	0.26	U F1	80.0	54.8	F1	ug/L		68	70 - 130
4-Methylphenol	0.24	U	80.0	51.0		ug/L		64	20 - 160
2-Nitrophenol	0.75	U	80.0	82.8		ug/L		104	70 - 130
2,4-Dimethylphenol	0.24	U	80.0	71.6		ug/L		89	70 - 130
2,4-Dichlorophenol	0.42	U	80.0	76.5		ug/L		96	70 - 130
4-Chloro-3-methylphenol	0.58	U	80.0	72.1		ug/L		90	20 - 160
2,4,6-Trichlorophenol	0.30	U	80.0	76.2		ug/L		95	20 - 160
2,4,5-Trichlorophenol	0.28	U	80.0	76.2		ug/L		95	20 - 160
2,4-Dinitrotoluene	1.0	U	80.0	84.4		ug/L		105	70 - 130
4-Nitrophenol	0.69	U	160	51.3		ug/L		32	20 - 160
4,6-Dinitro-2-methylphenol	13	U	160	174		ug/L		109	20 - 160
Pentachlorophenol	1.4	U	160	155		ug/L		97	20 - 160
Bis(2-chloroethyl)ether	0.30	U	80.0	74.7		ug/L		93	70 - 130
N-Nitrosodi-n-propylamine	0.43	U	80.0	76.1		ug/L		95	70 - 130
Hexachloroethane	1.2	U	80.0	38.2		ug/L		48	20 - 160
Nitrobenzene	0.57	U	80.0	76.7		ug/L		96	70 - 130
Isophorone	0.80	U	80.0	82.2		ug/L		103	70 - 130
Naphthalene	1.1	U	80.0	57.5		ug/L		72	70 - 130
4-Chloroaniline	1.9	U	80.0	70.8		ug/L		89	20 - 160
Hexachlorobutadiene	0.78	U * F1	80.0	41.4	F1	ug/L		52	70 - 130
2-Methylnaphthalene	1.1	U	80.0	60.8		ug/L		76	70 - 130
Hexachlorocyclopentadiene	1.7	U	80.0	44.7		ug/L		56	20 - 160
2-Chloronaphthalene	1.2	U	80.0	64.8		ug/L		81	70 - 130
2-Nitroaniline	0.47	U	80.0	73.8		ug/L		92	20 - 160
Dimethyl phthalate	0.77	U	80.0	81.1		ug/L		101	70 - 130
Acenaphthylene	0.82	U	80.0	75.3		ug/L		94	70 - 130
2,6-Dinitrotoluene	0.39	U	80.0	83.4		ug/L		104	70 - 130
3-Nitroaniline	0.96	U	80.0	67.3		ug/L		84	20 - 160
Acenaphthene	1.1	U	80.0	63.8		ug/L		80	70 - 130
Dibenzofuran	1.1	U	80.0	73.7		ug/L		92	70 - 130
2,4-Dinitrophenol	14	U	160	147		ug/L		92	20 - 160
Diethyl phthalate	0.98	U	80.0	83.3		ug/L		104	70 - 130
4-Chlorophenyl phenyl ether	1.3	U	80.0	76.1		ug/L		95	70 - 130
Fluorene	0.91	U	80.0	74.7		ug/L		93	70 - 130
4-Nitroaniline	0.54	U	80.0	74.1		ug/L		93	20 - 160
N-Nitrosodiphenylamine	0.89	U	80.0	79.6		ug/L		100	70 - 130
4-Bromophenyl phenyl ether	0.75	U	80.0	79.9		ug/L		100	70 - 130
Hexachlorobenzene	0.40	U	80.0	79.2		ug/L		99	70 - 130
Phenanthrene	0.58	U	80.0	78.0		ug/L		98	70 - 130
Anthracene	0.63	U	80.0	79.0		ug/L		99	70 - 130
Carbazole	0.68	U	80.0	79.1		ug/L		99	70 - 130
Di-n-butyl phthalate	0.84	U	80.0	88.2		ug/L		110	70 - 130
Fluoranthene	0.84	U	80.0	81.4		ug/L		102	70 - 130
Pyrene	1.6	U	80.0	85.9		ug/L		107	70 - 130
Butyl benzyl phthalate	0.85	U	80.0	92.8		ug/L		116	70 - 130
Benzo[a]anthracene	0.59	U	80.0	82.9		ug/L		104	70 - 130
Chrysene	0.91	U	80.0	80.4		ug/L		101	70 - 130

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

Lab Sample ID: 460-163302-5 MS
Matrix: Water
Analysis Batch: 547615

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 547574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	92.2		ug/L		115	70 - 130
Di-n-octyl phthalate	4.8	U	80.0	98.2		ug/L		123	70 - 130
Benzo[b]fluoranthene	1.1	U	80.0	86.0		ug/L		107	70 - 130
Benzo[k]fluoranthene	0.67	U	80.0	85.7		ug/L		107	70 - 130
Benzo[a]pyrene	0.41	U	80.0	86.2		ug/L		108	70 - 130
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	84.4		ug/L		105	70 - 130
Dibenz(a,h)anthracene	0.72	U	80.0	81.0		ug/L		101	70 - 130
Benzo[g,h,i]perylene	1.4	U	80.0	80.0		ug/L		100	70 - 130
1,1'-Biphenyl	1.2	U	80.0	64.7		ug/L		81	70 - 130
Acetophenone	0.79	U	80.0	75.9		ug/L		95	70 - 130
Benzaldehyde	0.59	U	160	163		ug/L		102	20 - 160
Caprolactam	0.68	U	160	46.5		ug/L		29	20 - 160
Atrazine	1.3	U	160	195	E	ug/L		122	70 - 130
2,2'-oxybis[1-chloropropane]	0.63	U	80.0	68.7		ug/L		86	70 - 130
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	60.4		ug/L		76	70 - 130
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	79.8		ug/L		100	70 - 130
3,3'-Dichlorobenzidine	1.4	U	80.0	76.7		ug/L		96	70 - 130
Bis(2-chloroethoxy)methane	0.24	U	80.0	81.6		ug/L		102	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*102*		*30 - 130*
Phenol-d5 (Surr)	*34*		*15 - 110*
Terphenyl-d14 (Surr)	*104*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*115*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*52*		*15 - 110*
2-Fluorobiphenyl	*92*		*30 - 130*

Lab Sample ID: 460-163302-5 MSD
Matrix: Water
Analysis Batch: 547615

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 547574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	0.29	U	80.0	27.0		ug/L		34	20 - 160	1	20
2-Chlorophenol	0.38	U	80.0	67.6		ug/L		84	70 - 130	0	20
2-Methylphenol	0.26	U F1	80.0	54.9	F1	ug/L		69	70 - 130	0	20
4-Methylphenol	0.24	U	80.0	50.0		ug/L		63	20 - 160	2	20
2-Nitrophenol	0.75	U	80.0	80.6		ug/L		101	70 - 130	3	20
2,4-Dimethylphenol	0.24	U	80.0	68.2		ug/L		85	70 - 130	5	20
2,4-Dichlorophenol	0.42	U	80.0	73.9		ug/L		92	70 - 130	3	20
4-Chloro-3-methylphenol	0.58	U	80.0	69.5		ug/L		87	20 - 160	4	20
2,4,6-Trichlorophenol	0.30	U	80.0	73.7		ug/L		92	20 - 160	3	20
2,4,5-Trichlorophenol	0.28	U	80.0	74.6		ug/L		93	20 - 160	2	20
2,4-Dinitrotoluene	1.0	U	80.0	82.7		ug/L		103	70 - 130	2	20
4-Nitrophenol	0.69	U	160	51.6		ug/L		32	20 - 160	1	20
4,6-Dinitro-2-methylphenol	13	U	160	170		ug/L		106	20 - 160	2	20
Pentachlorophenol	1.4	U	160	152		ug/L		95	20 - 160	2	20
Bis(2-chloroethyl)ether	0.30	U	80.0	73.7		ug/L		92	70 - 130	1	20
N-Nitrosodi-n-propylamine	0.43	U	80.0	73.9		ug/L		92	70 - 130	3	20

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

Lab Sample ID: 460-163302-5 MSD
Matrix: Water
Analysis Batch: 547615

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 547574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachloroethane	1.2	U	80.0	40.2		ug/L		50	20 - 160	5	20
Nitrobenzene	0.57	U	80.0	73.8		ug/L		92	70 - 130	4	20
Isophorone	0.80	U	80.0	77.8		ug/L		97	70 - 130	5	20
Naphthalene	1.1	U	80.0	55.7		ug/L		70	70 - 130	3	20
4-Chloroaniline	1.9	U	80.0	69.9		ug/L		87	20 - 160	1	20
Hexachlorobutadiene	0.78	U * F1	80.0	42.6	F1	ug/L		53	70 - 130	3	20
2-Methylnaphthalene	1.1	U	80.0	58.7		ug/L		73	70 - 130	3	20
Hexachlorocyclopentadiene	1.7	U	80.0	46.4		ug/L		58	20 - 160	4	20
2-Chloronaphthalene	1.2	U	80.0	62.9		ug/L		79	70 - 130	3	20
2-Nitroaniline	0.47	U	80.0	72.7		ug/L		91	20 - 160	2	20
Dimethyl phthalate	0.77	U	80.0	77.4		ug/L		97	70 - 130	5	20
Acenaphthylene	0.82	U	80.0	73.0		ug/L		91	70 - 130	3	20
2,6-Dinitrotoluene	0.39	U	80.0	79.7		ug/L		100	70 - 130	4	20
3-Nitroaniline	0.96	U	80.0	65.6		ug/L		82	20 - 160	3	20
Acenaphthene	1.1	U	80.0	64.2		ug/L		80	70 - 130	1	20
Dibenzofuran	1.1	U	80.0	71.1		ug/L		89	70 - 130	4	20
2,4-Dinitrophenol	14	U	160	148		ug/L		92	20 - 160	0	20
Diethyl phthalate	0.98	U	80.0	79.5		ug/L		99	70 - 130	5	20
4-Chlorophenyl phenyl ether	1.3	U	80.0	72.8		ug/L		91	70 - 130	4	20
Fluorene	0.91	U	80.0	72.5		ug/L		91	70 - 130	3	20
4-Nitroaniline	0.54	U	80.0	74.1		ug/L		93	20 - 160	0	20
N-Nitrosodiphenylamine	0.89	U	80.0	76.2		ug/L		95	70 - 130	4	20
4-Bromophenyl phenyl ether	0.75	U	80.0	78.0		ug/L		97	70 - 130	2	20
Hexachlorobenzene	0.40	U	80.0	76.8		ug/L		96	70 - 130	3	20
Phenanthrene	0.58	U	80.0	75.6		ug/L		95	70 - 130	3	20
Anthracene	0.63	U	80.0	76.2		ug/L		95	70 - 130	4	20
Carbazole	0.68	U	80.0	76.2		ug/L		95	70 - 130	4	20
Di-n-butyl phthalate	0.84	U	80.0	85.0		ug/L		106	70 - 130	4	20
Fluoranthene	0.84	U	80.0	77.4		ug/L		97	70 - 130	5	20
Pyrene	1.6	U	80.0	83.2		ug/L		104	70 - 130	3	20
Butyl benzyl phthalate	0.85	U	80.0	88.7		ug/L		111	70 - 130	5	20
Benzo[a]anthracene	0.59	U	80.0	78.9		ug/L		99	70 - 130	5	20
Chrysene	0.91	U	80.0	76.5		ug/L		96	70 - 130	5	20
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	88.5		ug/L		111	70 - 130	4	20
Di-n-octyl phthalate	4.8	U	80.0	93.0		ug/L		116	70 - 130	6	20
Benzo[b]fluoranthene	1.1	U	80.0	82.3		ug/L		103	70 - 130	4	20
Benzo[k]fluoranthene	0.67	U	80.0	85.2		ug/L		107	70 - 130	1	20
Benzo[a]pyrene	0.41	U	80.0	81.6		ug/L		102	70 - 130	5	20
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	82.7		ug/L		103	70 - 130	2	20
Dibenz(a,h)anthracene	0.72	U	80.0	78.4		ug/L		98	70 - 130	3	20
Benzo[g,h,i]perylene	1.4	U	80.0	77.6		ug/L		97	70 - 130	3	20
1,1'-Biphenyl	1.2	U	80.0	63.2		ug/L		79	70 - 130	2	20
Acetophenone	0.79	U	80.0	74.1		ug/L		93	70 - 130	2	20
Benzaldehyde	0.59	U	160	160		ug/L		100	20 - 160	2	20
Caprolactam	0.68	U	160	46.4		ug/L		29	20 - 160	0	20
Atrazine	1.3	U	160	186		ug/L		116	70 - 130	5	20
2,2'-oxybis[1-chloropropane]	0.63	U	80.0	66.5		ug/L		83	70 - 130	3	20
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	59.5		ug/L		74	70 - 130	2	20

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

Lab Sample ID: 460-163302-5 MSD
Matrix: Water
Analysis Batch: 547615

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 547574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	77.8		ug/L		97	70 - 130	3	20
3,3'-Dichlorobenzidine	1.4	U	80.0	74.0		ug/L		93	70 - 130	3	20
Bis(2-chloroethoxy)methane	0.24	U	80.0	77.4		ug/L		97	70 - 130	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*99*		*30 - 130*
Phenol-d5 (Surr)	*35*		*15 - 110*
Terphenyl-d14 (Surr)	*101*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*115*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*53*		*15 - 110*
2-Fluorobiphenyl	*90*		*30 - 130*

Lab Sample ID: MB 460-547599/1-A
Matrix: Water
Analysis Batch: 547625

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/26/18 18:05	08/26/18 23:54	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/26/18 18:05	08/26/18 23:54	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/26/18 18:05	08/26/18 23:54	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/26/18 23:54	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/26/18 23:54	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/26/18 23:54	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/26/18 18:05	08/26/18 23:54	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/26/18 23:54	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/26/18 18:05	08/26/18 23:54	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/26/18 18:05	08/26/18 23:54	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/26/18 18:05	08/26/18 23:54	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/26/18 18:05	08/26/18 23:54	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/26/18 18:05	08/26/18 23:54	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		08/26/18 18:05	08/26/18 23:54	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		08/26/18 18:05	08/26/18 23:54	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/26/18 18:05	08/26/18 23:54	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/26/18 18:05	08/26/18 23:54	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/26/18 18:05	08/26/18 23:54	1
Isophorone	0.80	U	10	0.80	ug/L		08/26/18 18:05	08/26/18 23:54	1
Naphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/26/18 23:54	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/26/18 18:05	08/26/18 23:54	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/26/18 18:05	08/26/18 23:54	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/26/18 23:54	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/26/18 18:05	08/26/18 23:54	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/26/18 23:54	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/26/18 18:05	08/26/18 23:54	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/26/18 18:05	08/26/18 23:54	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/26/18 18:05	08/26/18 23:54	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/26/18 18:05	08/26/18 23:54	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/26/18 18:05	08/26/18 23:54	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/26/18 23:54	1

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

Lab Sample ID: MB 460-547599/1-A
Matrix: Water
Analysis Batch: 547625

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.1	U	10	1.1	ug/L		08/26/18 18:05	08/26/18 23:54	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/26/18 18:05	08/26/18 23:54	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/26/18 18:05	08/26/18 23:54	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/26/18 18:05	08/26/18 23:54	1
Fluorene	0.91	U	10	0.91	ug/L		08/26/18 18:05	08/26/18 23:54	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/26/18 18:05	08/26/18 23:54	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/26/18 18:05	08/26/18 23:54	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/26/18 23:54	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		08/26/18 18:05	08/26/18 23:54	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/26/18 18:05	08/26/18 23:54	1
Anthracene	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/26/18 23:54	1
Carbazole	0.68	U	10	0.68	ug/L		08/26/18 18:05	08/26/18 23:54	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/26/18 23:54	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/26/18 18:05	08/26/18 23:54	1
Pyrene	1.6	U	10	1.6	ug/L		08/26/18 18:05	08/26/18 23:54	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/26/18 18:05	08/26/18 23:54	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		08/26/18 18:05	08/26/18 23:54	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/26/18 18:05	08/26/18 23:54	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/26/18 18:05	08/26/18 23:54	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/26/18 18:05	08/26/18 23:54	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		08/26/18 18:05	08/26/18 23:54	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/26/18 18:05	08/26/18 23:54	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		08/26/18 18:05	08/26/18 23:54	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		08/26/18 18:05	08/26/18 23:54	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		08/26/18 18:05	08/26/18 23:54	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/26/18 23:54	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/26/18 23:54	1
Acetophenone	0.79	U	10	0.79	ug/L		08/26/18 18:05	08/26/18 23:54	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/26/18 18:05	08/26/18 23:54	1
Caprolactam	0.68	U	10	0.68	ug/L		08/26/18 18:05	08/26/18 23:54	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/26/18 18:05	08/26/18 23:54	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/26/18 18:05	08/26/18 23:54	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/26/18 18:05	08/26/18 23:54	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/26/18 18:05	08/26/18 23:54	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/26/18 18:05	08/26/18 23:54	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/26/18 18:05	08/26/18 23:54	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/26/18 18:05*	*08/26/18 23:54*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*78*		*30 - 130*	*08/26/18 18:05*	*08/26/18 23:54*	*1*
Phenol-d5 (Surr)	*20*		*15 - 110*	*08/26/18 18:05*	*08/26/18 23:54*	*1*
Terphenyl-d14 (Surr)	*83*		*30 - 130*	*08/26/18 18:05*	*08/26/18 23:54*	*1*
2,4,6-Tribromophenol (Surr)	*87*		*15 - 110*	*08/26/18 18:05*	*08/26/18 23:54*	*1*
2-Fluorophenol (Surr)	*32*		*15 - 110*	*08/26/18 18:05*	*08/26/18 23:54*	*1*
2-Fluorobiphenyl	*66*		*30 - 130*	*08/26/18 18:05*	*08/26/18 23:54*	*1*

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

Lab Sample ID: LCS 460-547599/2-A
Matrix: Water
Analysis Batch: 547625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	80.0	23.7		ug/L		30	20 - 160
2-Chlorophenol	80.0	57.7		ug/L		72	70 - 130
2-Methylphenol	80.0	47.6	*	ug/L		60	70 - 130
4-Methylphenol	80.0	46.4		ug/L		58	20 - 160
2-Nitrophenol	80.0	78.4		ug/L		98	70 - 130
2,4-Dimethylphenol	80.0	64.9		ug/L		81	70 - 130
2,4-Dichlorophenol	80.0	73.3		ug/L		92	70 - 130
4-Chloro-3-methylphenol	80.0	68.5		ug/L		86	20 - 160
2,4,6-Trichlorophenol	80.0	74.1		ug/L		93	70 - 130
2,4,5-Trichlorophenol	80.0	68.1		ug/L		85	20 - 160
2,4-Dinitrotoluene	80.0	81.3		ug/L		102	70 - 130
4-Nitrophenol	160	54.5		ug/L		34	20 - 160
4,6-Dinitro-2-methylphenol	160	144		ug/L		90	20 - 160
Pentachlorophenol	160	140		ug/L		88	20 - 160
Bis(2-chloroethyl)ether	80.0	62.8		ug/L		79	70 - 130
N-Nitrosodi-n-propylamine	80.0	74.6		ug/L		93	70 - 130
Hexachloroethane	80.0	57.7		ug/L		72	20 - 160
Nitrobenzene	80.0	72.5		ug/L		91	70 - 130
Isophorone	80.0	75.3		ug/L		94	70 - 130
Naphthalene	80.0	69.0		ug/L		86	70 - 130
4-Chloroaniline	80.0	69.0		ug/L		86	20 - 160
Hexachlorobutadiene	80.0	72.0		ug/L		90	70 - 130
2-Methylnaphthalene	80.0	73.7		ug/L		92	70 - 130
Hexachlorocyclopentadiene	80.0	76.1		ug/L		95	20 - 160
2-Chloronaphthalene	80.0	71.5		ug/L		89	70 - 130
2-Nitroaniline	80.0	78.8		ug/L		98	20 - 160
Dimethyl phthalate	80.0	77.1		ug/L		96	70 - 130
Acenaphthylene	80.0	76.6		ug/L		96	70 - 130
2,6-Dinitrotoluene	80.0	78.4		ug/L		98	70 - 130
3-Nitroaniline	80.0	62.2		ug/L		78	20 - 160
Acenaphthene	80.0	69.6		ug/L		87	70 - 130
Dibenzofuran	80.0	75.6		ug/L		94	70 - 130
2,4-Dinitrophenol	160	126		ug/L		79	20 - 160
Diethyl phthalate	80.0	77.2		ug/L		97	70 - 130
4-Chlorophenyl phenyl ether	80.0	83.1		ug/L		104	70 - 130
Fluorene	80.0	80.8		ug/L		101	70 - 130
4-Nitroaniline	80.0	67.8		ug/L		85	20 - 160
N-Nitrosodiphenylamine	80.0	77.1		ug/L		96	70 - 130
4-Bromophenyl phenyl ether	80.0	81.9		ug/L		102	70 - 130
Hexachlorobenzene	80.0	82.9		ug/L		104	70 - 130
Phenanthrene	80.0	75.6		ug/L		94	70 - 130
Anthracene	80.0	76.1		ug/L		95	70 - 130
Carbazole	80.0	73.5		ug/L		92	70 - 130
Di-n-butyl phthalate	80.0	80.8		ug/L		101	70 - 130
Fluoranthene	80.0	78.3		ug/L		98	70 - 130
Pyrene	80.0	75.1		ug/L		94	70 - 130
Butyl benzyl phthalate	80.0	79.1		ug/L		99	70 - 130
Benzo[a]anthracene	80.0	77.4		ug/L		97	70 - 130

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

Lab Sample ID: LCS 460-547599/2-A
Matrix: Water
Analysis Batch: 547625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	80.0	76.4		ug/L		96	70 - 130
Bis(2-ethylhexyl) phthalate	80.0	80.2		ug/L		100	70 - 130
Di-n-octyl phthalate	80.0	79.5		ug/L		99	70 - 130
Benzo[b]fluoranthene	80.0	79.5		ug/L		99	70 - 130
Benzo[k]fluoranthene	80.0	76.2		ug/L		95	70 - 130
Benzo[a]pyrene	80.0	81.3		ug/L		102	70 - 130
Indeno[1,2,3-cd]pyrene	80.0	81.2		ug/L		102	70 - 130
Dibenz(a,h)anthracene	80.0	77.6		ug/L		97	70 - 130
Benzo[g,h,i]perylene	80.0	72.9		ug/L		91	70 - 130
1,1'-Biphenyl	80.0	72.1		ug/L		90	70 - 130
Acetophenone	80.0	77.3		ug/L		97	70 - 130
2,2'-oxybis[1-chloropropane]	80.0	57.7		ug/L		72	70 - 130
1,2,4,5-Tetrachlorobenzene	80.0	76.1		ug/L		95	70 - 130
2,3,4,6-Tetrachlorophenol	80.0	76.1		ug/L		95	70 - 130
3,3'-Dichlorobenzidine	80.0	78.8		ug/L		98	70 - 130
Bis(2-chloroethoxy)methane	80.0	72.6		ug/L		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*94*		*30 - 130*
Phenol-d5 (Surr)	*24*		*15 - 110*
Terphenyl-d14 (Surr)	*92*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*111*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*37*		*15 - 110*
2-Fluorobiphenyl	*84*		*30 - 130*

Lab Sample ID: LCS 460-547599/3-A
Matrix: Water
Analysis Batch: 547625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	320	288		ug/L		90	20 - 160
Caprolactam	320	54.7	*	ug/L		17	20 - 160
Atrazine	320	361		ug/L		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*91*		*30 - 130*
Phenol-d5 (Surr)	*24*		*15 - 110*
Terphenyl-d14 (Surr)	*96*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*105*		*15 - 110*
2-Fluorophenol (Surr)	*37*		*15 - 110*
2-Fluorobiphenyl	*79*		*30 - 130*

Lab Sample ID: 460-163112-E-9-B MS
Matrix: Water
Analysis Batch: 547625

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 547599

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	0.29	U	80.0	22.8		ug/L		28	20 - 160

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

Lab Sample ID: 460-163112-E-9-B MS
Matrix: Water
Analysis Batch: 547625

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 547599

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorophenol	0.38	U F1	80.0	54.4	F1	ug/L		68	70 - 130
2-Methylphenol	0.26	U * F1	80.0	45.4	F1	ug/L		57	70 - 130
4-Methylphenol	0.24	U	80.0	43.1		ug/L		54	20 - 160
2-Nitrophenol	0.75	U	80.0	73.1		ug/L		91	70 - 130
2,4-Dimethylphenol	0.24	U	80.0	59.2		ug/L		74	70 - 130
2,4-Dichlorophenol	0.42	U	80.0	66.0		ug/L		82	70 - 130
4-Chloro-3-methylphenol	0.58	U	80.0	61.6		ug/L		77	20 - 160
2,4,6-Trichlorophenol	0.30	U	80.0	67.7		ug/L		85	20 - 160
2,4,5-Trichlorophenol	0.28	U	80.0	63.0		ug/L		79	20 - 160
2,4-Dinitrotoluene	1.0	U	80.0	75.7		ug/L		95	70 - 130
4-Nitrophenol	0.69	U	160	50.8		ug/L		32	20 - 160
4,6-Dinitro-2-methylphenol	13	U	160	127		ug/L		79	20 - 160
Pentachlorophenol	1.4	U	160	129		ug/L		81	20 - 160
Bis(2-chloroethyl)ether	0.30	U	80.0	58.8		ug/L		74	70 - 130
N-Nitrosodi-n-propylamine	0.43	U	80.0	69.7		ug/L		87	70 - 130
Hexachloroethane	1.2	U	80.0	57.9		ug/L		72	20 - 160
Nitrobenzene	0.57	U	80.0	68.8		ug/L		86	70 - 130
Isophorone	0.80	U	80.0	69.6		ug/L		87	70 - 130
Naphthalene	1.1	U	80.0	68.6		ug/L		86	70 - 130
4-Chloroaniline	1.9	U	80.0	57.7		ug/L		72	20 - 160
Hexachlorobutadiene	0.78	U	80.0	73.8		ug/L		92	70 - 130
2-Methylnaphthalene	1.1	U	80.0	72.0		ug/L		90	70 - 130
Hexachlorocyclopentadiene	1.7	U	80.0	76.8		ug/L		96	20 - 160
2-Chloronaphthalene	1.2	U	80.0	69.9		ug/L		87	70 - 130
2-Nitroaniline	0.47	U	80.0	73.2		ug/L		91	20 - 160
Dimethyl phthalate	0.77	U	80.0	72.7		ug/L		91	70 - 130
Acenaphthylene	0.82	U	80.0	73.9		ug/L		92	70 - 130
2,6-Dinitrotoluene	0.39	U	80.0	74.1		ug/L		93	70 - 130
3-Nitroaniline	0.96	U	80.0	53.1		ug/L		66	20 - 160
Acenaphthene	1.1	U	80.0	65.4		ug/L		82	70 - 130
Dibenzofuran	1.1	U	80.0	71.7		ug/L		90	70 - 130
2,4-Dinitrophenol	14	U	160	112		ug/L		70	20 - 160
Diethyl phthalate	0.98	U	80.0	71.9		ug/L		90	70 - 130
4-Chlorophenyl phenyl ether	1.3	U	80.0	79.3		ug/L		99	70 - 130
Fluorene	0.91	U	80.0	74.8		ug/L		94	70 - 130
4-Nitroaniline	0.54	U	80.0	57.4		ug/L		72	20 - 160
N-Nitrosodiphenylamine	0.89	U	80.0	68.7		ug/L		86	70 - 130
4-Bromophenyl phenyl ether	0.75	U	80.0	74.1		ug/L		93	70 - 130
Hexachlorobenzene	0.40	U	80.0	77.9		ug/L		97	70 - 130
Phenanthrene	0.58	U	80.0	70.0		ug/L		87	70 - 130
Anthracene	0.63	U	80.0	68.7		ug/L		86	70 - 130
Carbazole	0.68	U	80.0	65.6		ug/L		82	70 - 130
Di-n-butyl phthalate	0.84	U	80.0	75.7		ug/L		95	70 - 130
Fluoranthene	0.84	U	80.0	70.7		ug/L		88	70 - 130
Pyrene	1.6	U	80.0	68.4		ug/L		86	70 - 130
Butyl benzyl phthalate	0.85	U	80.0	73.1		ug/L		91	70 - 130
Benzo[a]anthracene	0.59	U	80.0	71.7		ug/L		90	70 - 130
Chrysene	0.91	U	80.0	70.3		ug/L		88	70 - 130

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

Lab Sample ID: 460-163112-E-9-B MS
Matrix: Water
Analysis Batch: 547625

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 547599

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	76.0		ug/L		95	70 - 130
Di-n-octyl phthalate	4.8	U	80.0	74.7		ug/L		93	70 - 130
Benzo[b]fluoranthene	1.1	U	80.0	72.8		ug/L		91	70 - 130
Benzo[k]fluoranthene	0.67	U	80.0	68.7		ug/L		86	70 - 130
Benzo[a]pyrene	0.41	U	80.0	73.9		ug/L		92	70 - 130
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	73.9		ug/L		92	70 - 130
Dibenz(a,h)anthracene	0.72	U	80.0	71.5		ug/L		89	70 - 130
Benzo[g,h,i]perylene	1.4	U	80.0	68.9		ug/L		86	70 - 130
1,1'-Biphenyl	1.2	U	80.0	70.4		ug/L		88	70 - 130
Acetophenone	0.79	U	80.0	71.6		ug/L		89	70 - 130
Benzaldehyde	0.59	U	160	115		ug/L		72	20 - 160
Caprolactam	0.68	U * F1	160	29.9	F1	ug/L		19	20 - 160
Atrazine	1.3	U	160	147		ug/L		92	70 - 130
2,2'-oxybis[1-chloropropane]	0.63	U F1	80.0	54.3	F1	ug/L		68	70 - 130
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	77.2		ug/L		97	70 - 130
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	69.0		ug/L		86	70 - 130
3,3'-Dichlorobenzidine	1.4	U F1	80.0	38.7	F1	ug/L		48	70 - 130
Bis(2-chloroethoxy)methane	0.24	U	80.0	66.7		ug/L		83	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*84*		*30 - 130*
Phenol-d5 (Surr)	*23*		*15 - 110*
Terphenyl-d14 (Surr)	*87*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*104*		*15 - 110*
2-Fluorophenol (Surr)	*35*		*15 - 110*
2-Fluorobiphenyl	*83*		*30 - 130*

Lab Sample ID: 460-163112-E-9-C MSD
Matrix: Water
Analysis Batch: 547625

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 547599

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	0.29	U	80.0	25.2		ug/L		32	20 - 160	10	20
2-Chlorophenol	0.38	U F1	80.0	59.2		ug/L		74	70 - 130	8	20
2-Methylphenol	0.26	U * F1	80.0	50.1	F1	ug/L		63	70 - 130	10	20
4-Methylphenol	0.24	U	80.0	47.8		ug/L		60	20 - 160	10	20
2-Nitrophenol	0.75	U	80.0	81.6		ug/L		102	70 - 130	11	20
2,4-Dimethylphenol	0.24	U	80.0	66.0		ug/L		82	70 - 130	11	20
2,4-Dichlorophenol	0.42	U	80.0	72.9		ug/L		91	70 - 130	10	20
4-Chloro-3-methylphenol	0.58	U	80.0	68.6		ug/L		86	20 - 160	11	20
2,4,6-Trichlorophenol	0.30	U	80.0	73.8		ug/L		92	20 - 160	9	20
2,4,5-Trichlorophenol	0.28	U	80.0	68.3		ug/L		85	20 - 160	8	20
2,4-Dinitrotoluene	1.0	U	80.0	81.6		ug/L		102	70 - 130	7	20
4-Nitrophenol	0.69	U	160	56.4		ug/L		35	20 - 160	10	20
4,6-Dinitro-2-methylphenol	13	U	160	141		ug/L		88	20 - 160	10	20
Pentachlorophenol	1.4	U	160	143		ug/L		89	20 - 160	10	20
Bis(2-chloroethyl)ether	0.30	U	80.0	64.3		ug/L		80	70 - 130	9	20
N-Nitrosodi-n-propylamine	0.43	U	80.0	75.3		ug/L		94	70 - 130	8	20

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

Lab Sample ID: 460-163112-E-9-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 547625 — **Prep Batch: 547599**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachloroethane	1.2	U	80.0	64.4		ug/L		81	20 - 160	11	20
Nitrobenzene	0.57	U	80.0	76.6		ug/L		96	70 - 130	11	20
Isophorone	0.80	U	80.0	77.1		ug/L		96	70 - 130	10	20
Naphthalene	1.1	U	80.0	76.1		ug/L		95	70 - 130	10	20
4-Chloroaniline	1.9	U	80.0	62.9		ug/L		79	20 - 160	9	20
Hexachlorobutadiene	0.78	U	80.0	84.5		ug/L		106	70 - 130	13	20
2-Methylnaphthalene	1.1	U	80.0	79.6		ug/L		99	70 - 130	10	20
Hexachlorocyclopentadiene	1.7	U	80.0	84.0		ug/L		105	20 - 160	9	20
2-Chloronaphthalene	1.2	U	80.0	76.0		ug/L		95	70 - 130	8	20
2-Nitroaniline	0.47	U	80.0	75.5		ug/L		94	20 - 160	3	20
Dimethyl phthalate	0.77	U	80.0	78.0		ug/L		98	70 - 130	7	20
Acenaphthylene	0.82	U	80.0	80.1		ug/L		100	70 - 130	8	20
2,6-Dinitrotoluene	0.39	U	80.0	80.8		ug/L		101	70 - 130	9	20
3-Nitroaniline	0.96	U	80.0	55.8		ug/L		70	20 - 160	5	20
Acenaphthene	1.1	U	80.0	72.5		ug/L		91	70 - 130	10	20
Dibenzofuran	1.1	U	80.0	76.9		ug/L		96	70 - 130	7	20
2,4-Dinitrophenol	14	U	160	124		ug/L		77	20 - 160	10	20
Diethyl phthalate	0.98	U	80.0	77.6		ug/L		97	70 - 130	8	20
4-Chlorophenyl phenyl ether	1.3	U	80.0	85.4		ug/L		107	70 - 130	7	20
Fluorene	0.91	U	80.0	81.1		ug/L		101	70 - 130	8	20
4-Nitroaniline	0.54	U	80.0	59.9		ug/L		75	20 - 160	4	20
N-Nitrosodiphenylamine	0.89	U	80.0	76.4		ug/L		96	70 - 130	11	20
4-Bromophenyl phenyl ether	0.75	U	80.0	82.5		ug/L		103	70 - 130	11	20
Hexachlorobenzene	0.40	U	80.0	85.7		ug/L		107	70 - 130	10	20
Phenanthrene	0.58	U	80.0	76.0		ug/L		95	70 - 130	8	20
Anthracene	0.63	U	80.0	76.4		ug/L		95	70 - 130	11	20
Carbazole	0.68	U	80.0	72.6		ug/L		91	70 - 130	10	20
Di-n-butyl phthalate	0.84	U	80.0	81.8		ug/L		102	70 - 130	8	20
Fluoranthene	0.84	U	80.0	76.8		ug/L		96	70 - 130	8	20
Pyrene	1.6	U	80.0	76.0		ug/L		95	70 - 130	10	20
Butyl benzyl phthalate	0.85	U	80.0	80.3		ug/L		100	70 - 130	9	20
Benzo[a]anthracene	0.59	U	80.0	78.5		ug/L		98	70 - 130	9	20
Chrysene	0.91	U	80.0	77.3		ug/L		97	70 - 130	10	20
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	84.2		ug/L		105	70 - 130	10	20
Di-n-octyl phthalate	4.8	U	80.0	81.8		ug/L		102	70 - 130	9	20
Benzo[b]fluoranthene	1.1	U	80.0	79.5		ug/L		99	70 - 130	9	20
Benzo[k]fluoranthene	0.67	U	80.0	75.2		ug/L		94	70 - 130	9	20
Benzo[a]pyrene	0.41	U	80.0	81.9		ug/L		102	70 - 130	10	20
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	82.8		ug/L		103	70 - 130	11	20
Dibenz(a,h)anthracene	0.72	U	80.0	78.7		ug/L		98	70 - 130	10	20
Benzo[g,h,i]perylene	1.4	U	80.0	75.3		ug/L		94	70 - 130	9	20
1,1'-Biphenyl	1.2	U	80.0	76.6		ug/L		96	70 - 130	8	20
Acetophenone	0.79	U	80.0	79.0		ug/L		99	70 - 130	10	20
Benzaldehyde	0.59	U	160	127		ug/L		79	20 - 160	10	20
Caprolactam	0.68	U * F1	160	30.1	F1	ug/L		19	20 - 160	1	20
Atrazine	1.3	U	160	166		ug/L		104	70 - 130	13	20
2,2'-oxybis[1-chloropropane]	0.63	U F1	80.0	59.5		ug/L		74	70 - 130	9	20
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	83.0		ug/L		104	70 - 130	7	20

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

Lab Sample ID: 460-163112-E-9-C MSD
Matrix: Water
Analysis Batch: 547625

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 547599

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	74.1		ug/L		93	70 - 130	7	20
3,3'-Dichlorobenzidine	1.4	U F1	80.0	36.3	F1	ug/L		45	70 - 130	6	20
Bis(2-chloroethoxy)methane	0.24	U	80.0	73.6		ug/L		92	70 - 130	10	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*99*		*30 - 130*
Phenol-d5 (Surr)	*27*		*15 - 110*
Terphenyl-d14 (Surr)	*96*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*113*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*40*		*15 - 110*
2-Fluorobiphenyl	*95*		*30 - 130*

Lab Sample ID: MB 460-548149/1-A
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/28/18 20:11	08/29/18 07:49	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/28/18 20:11	08/29/18 07:49	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 07:49	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/28/18 20:11	08/29/18 07:49	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/28/18 20:11	08/29/18 07:49	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		08/28/18 20:11	08/29/18 07:49	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		08/28/18 20:11	08/29/18 07:49	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/28/18 20:11	08/29/18 07:49	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/28/18 20:11	08/29/18 07:49	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/28/18 20:11	08/29/18 07:49	1
Isophorone	0.80	U	10	0.80	ug/L		08/28/18 20:11	08/29/18 07:49	1
Naphthalene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/28/18 20:11	08/29/18 07:49	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/28/18 20:11	08/29/18 07:49	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 07:49	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/28/18 20:11	08/29/18 07:49	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 07:49	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/28/18 20:11	08/29/18 07:49	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/28/18 20:11	08/29/18 07:49	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/28/18 20:11	08/29/18 07:49	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/28/18 20:11	08/29/18 07:49	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 07:49	1

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

Lab Sample ID: MB 460-548149/1-A
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.1	U	10	1.1	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/28/18 20:11	08/29/18 07:49	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/28/18 20:11	08/29/18 07:49	1
Fluorene	0.91	U	10	0.91	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/28/18 20:11	08/29/18 07:49	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/28/18 20:11	08/29/18 07:49	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/28/18 20:11	08/29/18 07:49	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		08/28/18 20:11	08/29/18 07:49	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/28/18 20:11	08/29/18 07:49	1
Anthracene	0.63	U	10	0.63	ug/L		08/28/18 20:11	08/29/18 07:49	1
Carbazole	0.68	U	10	0.68	ug/L		08/28/18 20:11	08/29/18 07:49	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/28/18 20:11	08/29/18 07:49	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/28/18 20:11	08/29/18 07:49	1
Pyrene	1.6	U	10	1.6	ug/L		08/28/18 20:11	08/29/18 07:49	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/28/18 20:11	08/29/18 07:49	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		08/28/18 20:11	08/29/18 07:49	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/28/18 20:11	08/29/18 07:49	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/28/18 20:11	08/29/18 07:49	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/28/18 20:11	08/29/18 07:49	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		08/28/18 20:11	08/29/18 07:49	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/28/18 20:11	08/29/18 07:49	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		08/28/18 20:11	08/29/18 07:49	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		08/28/18 20:11	08/29/18 07:49	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		08/28/18 20:11	08/29/18 07:49	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/28/18 20:11	08/29/18 07:49	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 07:49	1
Acetophenone	0.79	U	10	0.79	ug/L		08/28/18 20:11	08/29/18 07:49	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/28/18 20:11	08/29/18 07:49	1
Caprolactam	0.68	U	10	0.68	ug/L		08/28/18 20:11	08/29/18 07:49	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/28/18 20:11	08/29/18 07:49	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/28/18 20:11	08/29/18 07:49	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/28/18 20:11	08/29/18 07:49	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/28/18 20:11	08/29/18 07:49	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/28/18 20:11	08/29/18 07:49	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/28/18 20:11*	*08/29/18 07:49*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*98*		*30 - 130*	*08/28/18 20:11*	*08/29/18 07:49*	*1*
Phenol-d5 (Surr)	*32*		*15 - 110*	*08/28/18 20:11*	*08/29/18 07:49*	*1*
Terphenyl-d14 (Surr)	*97*		*30 - 130*	*08/28/18 20:11*	*08/29/18 07:49*	*1*
2,4,6-Tribromophenol (Surr)	*103*		*15 - 110*	*08/28/18 20:11*	*08/29/18 07:49*	*1*
2-Fluorophenol (Surr)	*48*		*15 - 110*	*08/28/18 20:11*	*08/29/18 07:49*	*1*
2-Fluorobiphenyl	*94*		*30 - 130*	*08/28/18 20:11*	*08/29/18 07:49*	*1*

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

Lab Sample ID: LCS 460-548149/2-A
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	80.0	30.3		ug/L		38	20 - 160
2-Chlorophenol	80.0	71.1		ug/L		89	70 - 130
2-Methylphenol	80.0	59.6		ug/L		74	70 - 130
4-Methylphenol	80.0	55.3		ug/L		69	20 - 160
2-Nitrophenol	80.0	83.8		ug/L		105	70 - 130
2,4-Dimethylphenol	80.0	74.8		ug/L		93	70 - 130
2,4-Dichlorophenol	80.0	79.3		ug/L		99	70 - 130
4-Chloro-3-methylphenol	80.0	75.1		ug/L		94	20 - 160
2,4,6-Trichlorophenol	80.0	84.9		ug/L		106	70 - 130
2,4,5-Trichlorophenol	80.0	86.3		ug/L		108	20 - 160
2,4-Dinitrotoluene	80.0	92.3		ug/L		115	70 - 130
4-Nitrophenol	160	63.4		ug/L		40	20 - 160
4,6-Dinitro-2-methylphenol	160	196		ug/L		122	20 - 160
Pentachlorophenol	160	175		ug/L		109	20 - 160
Bis(2-chloroethyl)ether	80.0	76.2		ug/L		95	70 - 130
N-Nitrosodi-n-propylamine	80.0	76.0		ug/L		95	70 - 130
Hexachloroethane	80.0	68.7		ug/L		86	20 - 160
Nitrobenzene	80.0	80.1		ug/L		100	70 - 130
Isophorone	80.0	83.4		ug/L		104	70 - 130
Naphthalene	80.0	77.1		ug/L		96	70 - 130
4-Chloroaniline	80.0	76.6		ug/L		96	20 - 160
Hexachlorobutadiene	80.0	74.4		ug/L		93	70 - 130
2-Methylnaphthalene	80.0	77.9		ug/L		97	70 - 130
Hexachlorocyclopentadiene	80.0	86.1		ug/L		108	20 - 160
2-Chloronaphthalene	80.0	84.3		ug/L		105	70 - 130
2-Nitroaniline	80.0	87.9		ug/L		110	20 - 160
Dimethyl phthalate	80.0	86.4		ug/L		108	70 - 130
Acenaphthylene	80.0	92.0		ug/L		115	70 - 130
2,6-Dinitrotoluene	80.0	89.1		ug/L		111	70 - 130
3-Nitroaniline	80.0	81.0		ug/L		101	20 - 160
Acenaphthene	80.0	78.3		ug/L		98	70 - 130
Dibenzofuran	80.0	85.7		ug/L		107	70 - 130
2,4-Dinitrophenol	160	170		ug/L		106	20 - 160
Diethyl phthalate	80.0	85.1		ug/L		106	70 - 130
4-Chlorophenyl phenyl ether	80.0	85.1		ug/L		106	70 - 130
Fluorene	80.0	86.2		ug/L		108	70 - 130
4-Nitroaniline	80.0	88.9		ug/L		111	20 - 160
N-Nitrosodiphenylamine	80.0	87.9		ug/L		110	70 - 130
4-Bromophenyl phenyl ether	80.0	87.1		ug/L		109	70 - 130
Hexachlorobenzene	80.0	85.7		ug/L		107	70 - 130
Phenanthrene	80.0	88.5		ug/L		111	70 - 130
Anthracene	80.0	89.0		ug/L		111	70 - 130
Carbazole	80.0	92.6		ug/L		116	70 - 130
Di-n-butyl phthalate	80.0	92.1		ug/L		115	70 - 130
Fluoranthene	80.0	94.2		ug/L		118	70 - 130
Pyrene	80.0	88.8		ug/L		111	70 - 130
Butyl benzyl phthalate	80.0	93.8		ug/L		117	70 - 130
Benzo[a]anthracene	80.0	93.0		ug/L		116	70 - 130

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

Lab Sample ID: LCS 460-548149/2-A
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	80.0	94.3		ug/L		118	70 - 130
Bis(2-ethylhexyl) phthalate	80.0	90.8		ug/L		113	70 - 130
Di-n-octyl phthalate	80.0	92.4		ug/L		115	70 - 130
Benzo[b]fluoranthene	80.0	94.0		ug/L		118	70 - 130
Benzo[k]fluoranthene	80.0	96.5		ug/L		121	70 - 130
Benzo[a]pyrene	80.0	96.1		ug/L		120	70 - 130
Indeno[1,2,3-cd]pyrene	80.0	104		ug/L		130	70 - 130
Dibenz(a,h)anthracene	80.0	101		ug/L		126	70 - 130
Benzo[g,h,i]perylene	80.0	97.2		ug/L		121	70 - 130
1,1'-Biphenyl	80.0	83.8		ug/L		105	70 - 130
Acetophenone	80.0	77.9		ug/L		97	70 - 130
2,2'-oxybis[1-chloropropane]	80.0	71.4		ug/L		89	70 - 130
1,2,4,5-Tetrachlorobenzene	80.0	82.1		ug/L		103	70 - 130
2,3,4,6-Tetrachlorophenol	80.0	87.6		ug/L		109	70 - 130
3,3'-Dichlorobenzidine	80.0	87.7		ug/L		110	70 - 130
Bis(2-chloroethoxy)methane	80.0	78.4		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*98*		*30 - 130*
Phenol-d5 (Surr)	*35*		*15 - 110*
Terphenyl-d14 (Surr)	*100*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*112*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*52*		*15 - 110*
2-Fluorobiphenyl	*100*		*30 - 130*

Lab Sample ID: LCS 460-548149/3-A
Matrix: Water
Analysis Batch: 548257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	160	154		ug/L		96	20 - 160
Caprolactam	160	45.1		ug/L		28	20 - 160
Atrazine	160	179		ug/L		112	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*99*		*30 - 130*
Phenol-d5 (Surr)	*32*		*15 - 110*
Terphenyl-d14 (Surr)	*103*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*106*		*15 - 110*
2-Fluorophenol (Surr)	*48*		*15 - 110*
2-Fluorobiphenyl	*95*		*30 - 130*

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 548257

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	0.30	U	83.3	25.0		ug/L		30	20 - 160

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

Lab Sample ID: 460-163302-21 MS | **Client Sample ID: PMS-230-082418**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 548257 | **Prep Batch: 548149**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorophenol	0.38	U	83.3	61.0		ug/L		73	70 - 130
2-Methylphenol	0.26	U F1	83.3	51.0	F1	ug/L		61	70 - 130
4-Methylphenol	0.24	U	83.3	47.7		ug/L		57	20 - 160
2-Nitrophenol	0.76	U	83.3	73.9		ug/L		89	70 - 130
2,4-Dimethylphenol	0.24	U	83.3	65.6		ug/L		79	70 - 130
2,4-Dichlorophenol	0.43	U	83.3	70.8		ug/L		85	70 - 130
4-Chloro-3-methylphenol	0.59	U	83.3	69.6		ug/L		84	20 - 160
2,4,6-Trichlorophenol	0.31	U	83.3	73.1		ug/L		88	20 - 160
2,4,5-Trichlorophenol	0.28	U	83.3	73.9		ug/L		89	20 - 160
2,4-Dinitrotoluene	1.0	U	83.3	81.3		ug/L		98	70 - 130
4-Nitrophenol	0.70	U	167	54.9		ug/L		33	20 - 160
4,6-Dinitro-2-methylphenol	14	U	167	168		ug/L		101	20 - 160
Pentachlorophenol	1.5	U	167	141		ug/L		84	20 - 160
Bis(2-chloroethyl)ether	0.30	U	83.3	64.1		ug/L		77	70 - 130
N-Nitrosodi-n-propylamine	0.44	U	83.3	66.6		ug/L		80	70 - 130
Hexachloroethane	1.2	U	83.3	68.9		ug/L		83	20 - 160
Nitrobenzene	0.58	U	83.3	66.4		ug/L		80	70 - 130
Isophorone	0.81	U	83.3	73.6		ug/L		88	70 - 130
Naphthalene	5.0	J	83.3	75.0		ug/L		84	70 - 130
4-Chloroaniline	1.9	U	83.3	55.3		ug/L		66	20 - 160
Hexachlorobutadiene	0.80	U	83.3	69.5		ug/L		83	70 - 130
2-Methylnaphthalene	1.1	U	83.3	71.4		ug/L		86	70 - 130
Hexachlorocyclopentadiene	1.8	U	83.3	77.2		ug/L		93	20 - 160
2-Chloronaphthalene	1.2	U	83.3	72.7		ug/L		87	70 - 130
2-Nitroaniline	0.48	U	83.3	71.1		ug/L		85	20 - 160
Dimethyl phthalate	0.78	U	83.3	75.3		ug/L		90	70 - 130
Acenaphthylene	0.84	U	83.3	79.9		ug/L		96	70 - 130
2,6-Dinitrotoluene	0.40	U	83.3	76.8		ug/L		92	70 - 130
3-Nitroaniline	0.98	U F1	83.3	15.1	F1	ug/L		18	20 - 160
Acenaphthene	1.1	U	83.3	66.8		ug/L		80	70 - 130
Dibenzofuran	1.1	U	83.3	74.6		ug/L		90	70 - 130
2,4-Dinitrophenol	15	U	167	147		ug/L		88	20 - 160
Diethyl phthalate	1.0	U	83.3	76.1		ug/L		91	70 - 130
4-Chlorophenyl phenyl ether	1.3	U	83.3	73.6		ug/L		88	70 - 130
Fluorene	0.93	U	83.3	74.7		ug/L		90	70 - 130
4-Nitroaniline	0.55	U	83.3	61.1		ug/L		73	20 - 160
N-Nitrosodiphenylamine	0.91	U	83.3	75.9		ug/L		91	70 - 130
4-Bromophenyl phenyl ether	0.76	U	83.3	75.7		ug/L		91	70 - 130
Hexachlorobenzene	0.40	U	83.3	76.8		ug/L		92	70 - 130
Phenanthrene	0.59	U	83.3	76.5		ug/L		92	70 - 130
Anthracene	0.65	U	83.3	77.1		ug/L		93	70 - 130
Carbazole	0.69	U	83.3	79.0		ug/L		95	70 - 130
Di-n-butyl phthalate	0.86	U	83.3	82.8		ug/L		99	70 - 130
Fluoranthene	0.86	U	83.3	81.3		ug/L		98	70 - 130
Pyrene	1.7	U	83.3	79.1		ug/L		95	70 - 130
Butyl benzyl phthalate	0.87	U	83.3	86.3		ug/L		104	70 - 130
Benzo[a]anthracene	0.60	U	83.3	79.2		ug/L		95	70 - 130
Chrysene	0.93	U	83.3	79.6		ug/L		96	70 - 130

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

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 548257

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate	1.7	U	83.3	83.5		ug/L		100	70 - 130
Di-n-octyl phthalate	4.9	U	83.3	86.5		ug/L		104	70 - 130
Benzo[b]fluoranthene	1.2	U	83.3	79.4		ug/L		95	70 - 130
Benzo[k]fluoranthene	0.69	U	83.3	84.3		ug/L		101	70 - 130
Benzo[a]pyrene	0.41	U	83.3	83.0		ug/L		100	70 - 130
Indeno[1,2,3-cd]pyrene	1.3	U	83.3	87.0		ug/L		104	70 - 130
Dibenz(a,h)anthracene	0.73	U	83.3	84.5		ug/L		101	70 - 130
Benzo[g,h,i]perylene	1.5	U	83.3	81.5		ug/L		98	70 - 130
1,1'-Biphenyl	1.2	U	83.3	72.4		ug/L		87	70 - 130
Acetophenone	0.81	U	83.3	67.4		ug/L		81	70 - 130
Benzaldehyde	0.60	U	167	121		ug/L		72	20 - 160
Caprolactam	0.70	U	167	38.7		ug/L		23	20 - 160
Atrazine	1.4	U	167	146		ug/L		88	70 - 130
2,2'-oxybis[1-chloropropane]	0.64	U	83.3	62.4		ug/L		75	70 - 130
1,2,4,5-Tetrachlorobenzene	1.3	U	83.3	71.0		ug/L		85	70 - 130
2,3,4,6-Tetrachlorophenol	0.76	U	83.3	76.5		ug/L		92	70 - 130
3,3'-Dichlorobenzidine	1.5	U	83.3	58.2		ug/L		70	70 - 130
Bis(2-chloroethoxy)methane	0.24	U	83.3	69.3		ug/L		83	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*77*		*30 - 130*
Phenol-d5 (Surr)	*28*		*15 - 110*
Terphenyl-d14 (Surr)	*83*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*94*		*15 - 110*
2-Fluorophenol (Surr)	*43*		*15 - 110*
2-Fluorobiphenyl	*84*		*30 - 130*

Lab Sample ID: 460-163302-21 MSD
Matrix: Water
Analysis Batch: 548257

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	0.30	U	83.3	27.8		ug/L		33	20 - 160	11	20
2-Chlorophenol	0.38	U	83.3	63.7		ug/L		76	70 - 130	4	20
2-Methylphenol	0.26	U F1	83.3	55.1	F1	ug/L		66	70 - 130	8	20
4-Methylphenol	0.24	U	83.3	51.3		ug/L		62	20 - 160	7	20
2-Nitrophenol	0.76	U	83.3	77.1		ug/L		92	70 - 130	4	20
2,4-Dimethylphenol	0.24	U	83.3	70.7		ug/L		85	70 - 130	7	20
2,4-Dichlorophenol	0.43	U	83.3	75.5		ug/L		91	70 - 130	6	20
4-Chloro-3-methylphenol	0.59	U	83.3	73.4		ug/L		88	20 - 160	5	20
2,4,6-Trichlorophenol	0.31	U	83.3	79.6		ug/L		96	20 - 160	8	20
2,4,5-Trichlorophenol	0.28	U	83.3	79.5		ug/L		95	20 - 160	7	20
2,4-Dinitrotoluene	1.0	U	83.3	88.8		ug/L		107	70 - 130	9	20
4-Nitrophenol	0.70	U	167	63.2		ug/L		38	20 - 160	14	20
4,6-Dinitro-2-methylphenol	14	U	167	174		ug/L		105	20 - 160	3	20
Pentachlorophenol	1.5	U	167	135		ug/L		81	20 - 160	4	20
Bis(2-chloroethyl)ether	0.30	U	83.3	66.5		ug/L		80	70 - 130	4	20
N-Nitrosodi-n-propylamine	0.44	U	83.3	69.9		ug/L		84	70 - 130	5	20

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

Lab Sample ID: 460-163302-21 MSD
Matrix: Water
Analysis Batch: 548257

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachloroethane	1.2	U	83.3	71.1		ug/L		85	20 - 160	3	20
Nitrobenzene	0.58	U	83.3	71.1		ug/L		85	70 - 130	7	20
Isophorone	0.81	U	83.3	78.1		ug/L		94	70 - 130	6	20
Naphthalene	5.0	J	83.3	77.7		ug/L		87	70 - 130	4	20
4-Chloroaniline	1.9	U	83.3	64.2		ug/L		77	20 - 160	15	20
Hexachlorobutadiene	0.80	U	83.3	73.6		ug/L		88	70 - 130	6	20
2-Methylnaphthalene	1.1	U	83.3	75.6		ug/L		91	70 - 130	6	20
Hexachlorocyclopentadiene	1.8	U	83.3	80.9		ug/L		97	20 - 160	5	20
2-Chloronaphthalene	1.2	U	83.3	77.5		ug/L		93	70 - 130	6	20
2-Nitroaniline	0.48	U	83.3	78.5		ug/L		94	20 - 160	10	20
Dimethyl phthalate	0.78	U	83.3	81.9		ug/L		98	70 - 130	8	20
Acenaphthylene	0.84	U	83.3	85.4		ug/L		103	70 - 130	7	20
2,6-Dinitrotoluene	0.40	U	83.3	82.7		ug/L		99	70 - 130	7	20
3-Nitroaniline	0.98	U F1	83.3	15.6	F1	ug/L		19	20 - 160	3	20
Acenaphthene	1.1	U	83.3	71.7		ug/L		86	70 - 130	7	20
Dibenzofuran	1.1	U	83.3	79.9		ug/L		96	70 - 130	7	20
2,4-Dinitrophenol	15	U	167	160		ug/L		96	20 - 160	8	20
Diethyl phthalate	1.0	U	83.3	82.8		ug/L		99	70 - 130	8	20
4-Chlorophenyl phenyl ether	1.3	U	83.3	80.4		ug/L		96	70 - 130	9	20
Fluorene	0.93	U	83.3	80.7		ug/L		97	70 - 130	8	20
4-Nitroaniline	0.55	U	83.3	67.8		ug/L		81	20 - 160	10	20
N-Nitrosodiphenylamine	0.91	U	83.3	83.6		ug/L		100	70 - 130	10	20
4-Bromophenyl phenyl ether	0.76	U	83.3	81.5		ug/L		98	70 - 130	7	20
Hexachlorobenzene	0.40	U	83.3	81.5		ug/L		98	70 - 130	6	20
Phenanthrene	0.59	U	83.3	82.3		ug/L		99	70 - 130	7	20
Anthracene	0.65	U	83.3	82.5		ug/L		99	70 - 130	7	20
Carbazole	0.69	U	83.3	86.0		ug/L		103	70 - 130	8	20
Di-n-butyl phthalate	0.86	U	83.3	89.7		ug/L		108	70 - 130	8	20
Fluoranthene	0.86	U	83.3	88.5		ug/L		106	70 - 130	9	20
Pyrene	1.7	U	83.3	85.8		ug/L		103	70 - 130	8	20
Butyl benzyl phthalate	0.87	U	83.3	92.9		ug/L		111	70 - 130	7	20
Benzo[a]anthracene	0.60	U	83.3	87.9		ug/L		105	70 - 130	10	20
Chrysene	0.93	U	83.3	86.8		ug/L		104	70 - 130	9	20
Bis(2-ethylhexyl) phthalate	1.7	U	83.3	90.7		ug/L		109	70 - 130	8	20
Di-n-octyl phthalate	4.9	U	83.3	95.8		ug/L		115	70 - 130	10	20
Benzo[b]fluoranthene	1.2	U	83.3	91.3		ug/L		110	70 - 130	14	20
Benzo[k]fluoranthene	0.69	U	83.3	90.5		ug/L		109	70 - 130	7	20
Benzo[a]pyrene	0.41	U	83.3	91.4		ug/L		110	70 - 130	10	20
Indeno[1,2,3-cd]pyrene	1.3	U	83.3	94.9		ug/L		114	70 - 130	9	20
Dibenz(a,h)anthracene	0.73	U	83.3	95.6		ug/L		115	70 - 130	12	20
Benzo[g,h,i]perylene	1.5	U	83.3	89.5		ug/L		107	70 - 130	9	20
1,1'-Biphenyl	1.2	U	83.3	77.1		ug/L		93	70 - 130	6	20
Acetophenone	0.81	U	83.3	71.2		ug/L		85	70 - 130	6	20
Benzaldehyde	0.60	U	167	120		ug/L		72	20 - 160	1	20
Caprolactam	0.70	U	167	45.3		ug/L		27	20 - 160	16	20
Atrazine	1.4	U	167	155		ug/L		93	70 - 130	6	20
2,2'-oxybis[1-chloropropane]	0.64	U	83.3	63.6		ug/L		76	70 - 130	2	20
1,2,4,5-Tetrachlorobenzene	1.3	U	83.3	77.5		ug/L		93	70 - 130	9	20

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

Lab Sample ID: 460-163302-21 MSD
Matrix: Water
Analysis Batch: 548257

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,4,6-Tetrachlorophenol	0.76	U	83.3	80.9		ug/L		97	70 - 130	6	20
3,3'-Dichlorobenzidine	1.5	U	83.3	63.4		ug/L		76	70 - 130	9	20
Bis(2-chloroethoxy)methane	0.24	U	83.3	73.1		ug/L		88	70 - 130	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*79*		*30 - 130*
Phenol-d5 (Surr)	*29*		*15 - 110*
Terphenyl-d14 (Surr)	*89*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*97*		*15 - 110*
2-Fluorophenol (Surr)	*44*		*15 - 110*
2-Fluorobiphenyl	*87*		*30 - 130*

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

Lab Sample ID: MB 460-547574/1-A
Matrix: Water
Analysis Batch: 547929

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/26/18 16:46	08/28/18 07:11	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/26/18 16:46	08/28/18 07:11	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 16:46	08/28/18 07:11	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/26/18 16:46	08/28/18 07:11	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/26/18 16:46	08/28/18 07:11	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/26/18 16:46	08/28/18 07:11	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/26/18 16:46	08/28/18 07:11	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 16:46	08/28/18 07:11	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 16:46	08/28/18 07:11	1

Lab Sample ID: LCS 460-547574/4-A
Matrix: Water
Analysis Batch: 547929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.900		ug/L		113	70 - 130
Benzo[a]pyrene	0.800	0.869		ug/L		109	70 - 130
Benzo[b]fluoranthene	0.800	0.830		ug/L		104	70 - 130
Bis(2-chloroethyl)ether	0.800	0.949		ug/L		119	70 - 130
Dibenz(a,h)anthracene	0.800	0.933		ug/L		117	70 - 130
Hexachlorobenzene	0.800	0.819		ug/L		102	70 - 130
Indeno[1,2,3-cd]pyrene	0.800	1.01		ug/L		126	70 - 130
N-Nitrosodimethylamine	0.800	0.634		ug/L		79	20 - 160
Pentachlorophenol	1.60	0.881		ug/L		55	20 - 160

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

Lab Sample ID: LCSD 460-547574/5-A
Matrix: Water
Analysis Batch: 547929

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 547574

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	1.07	*	ug/L		133	70 - 130	17	20
Benzo[a]pyrene	0.800	1.06	*	ug/L		133	70 - 130	20	20
Benzo[b]fluoranthene	0.800	0.988		ug/L		123	70 - 130	17	20
Bis(2-chloroethyl)ether	0.800	1.10	*	ug/L		138	70 - 130	15	20
Dibenz(a,h)anthracene	0.800	1.18	*	ug/L		148	70 - 130	24	20
Hexachlorobenzene	0.800	1.07	*	ug/L		134	70 - 130	26	20
Indeno[1,2,3-cd]pyrene	0.800	1.30	*	ug/L		163	70 - 130	25	20
N-Nitrosodimethylamine	0.800	0.727		ug/L		91	20 - 160	14	20
Pentachlorophenol	1.60	1.06		ug/L		66	20 - 160	19	20

Lab Sample ID: MB 460-547599/1-A
Matrix: Water
Analysis Batch: 547710

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/26/18 18:05	08/27/18 11:50	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/26/18 18:05	08/27/18 11:50	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/26/18 18:05	08/27/18 11:50	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/26/18 18:05	08/27/18 11:50	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/26/18 18:05	08/27/18 11:50	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/26/18 18:05	08/27/18 11:50	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/26/18 18:05	08/27/18 11:50	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/26/18 18:05	08/27/18 11:50	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/26/18 18:05	08/27/18 11:50	1

Lab Sample ID: LCS 460-547599/4-A
Matrix: Water
Analysis Batch: 547929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	1.00		ug/L		125	70 - 130
Benzo[a]pyrene	0.800	0.999		ug/L		125	70 - 130
Benzo[b]fluoranthene	0.800	0.901		ug/L		113	70 - 130
Bis(2-chloroethyl)ether	0.800	1.02		ug/L		128	70 - 130
Dibenz(a,h)anthracene	0.800	1.12	*	ug/L		140	70 - 130
Hexachlorobenzene	0.800	1.29	*	ug/L		162	70 - 130
Indeno[1,2,3-cd]pyrene	0.800	1.20	*	ug/L		150	70 - 130
N-Nitrosodimethylamine	0.800	0.529		ug/L		66	20 - 160
Pentachlorophenol	1.60	1.11		ug/L		70	20 - 160

Lab Sample ID: LCSD 460-547599/5-A
Matrix: Water
Analysis Batch: 547710

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 547599

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.866		ug/L		108	70 - 130	15	20
Benzo[a]pyrene	0.800	0.931		ug/L		116	70 - 130	7	20
Benzo[b]fluoranthene	0.800	0.915		ug/L		114	70 - 130	2	20
Bis(2-chloroethyl)ether	0.800	1.03		ug/L		129	70 - 130	1	20

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

Lab Sample ID: LCSD 460-547599/5-A
Matrix: Water
Analysis Batch: 547710

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 547599

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibenz(a,h)anthracene	0.800	0.924		ug/L		116	70 - 130	19	20
Hexachlorobenzene	0.800	1.20	*	ug/L		150	70 - 130	7	20
Indeno[1,2,3-cd]pyrene	0.800	0.916	*	ug/L		114	70 - 130	27	20
N-Nitrosodimethylamine	0.800	0.513		ug/L		64	20 - 160	3	20
Pentachlorophenol	1.60	1.30		ug/L		81	20 - 160	15	20

Lab Sample ID: MB 460-548149/1-A
Matrix: Water
Analysis Batch: 548270

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/28/18 20:11	08/29/18 08:48	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/28/18 20:11	08/29/18 08:48	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/28/18 20:11	08/29/18 08:48	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/28/18 20:11	08/29/18 08:48	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/28/18 20:11	08/29/18 08:48	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/28/18 20:11	08/29/18 08:48	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/28/18 20:11	08/29/18 08:48	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/28/18 20:11	08/29/18 08:48	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/28/18 20:11	08/29/18 08:48	1

Lab Sample ID: LCS 460-548149/4-A
Matrix: Water
Analysis Batch: 548270

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.674		ug/L		84	70 - 130
Benzo[a]pyrene	0.800	0.758		ug/L		95	70 - 130
Benzo[b]fluoranthene	0.800	0.667		ug/L		83	70 - 130
Bis(2-chloroethyl)ether	0.800	0.763		ug/L		95	70 - 130
Dibenz(a,h)anthracene	0.800	1.09	*	ug/L		136	70 - 130
Hexachlorobenzene	0.800	0.839		ug/L		105	70 - 130
Indeno[1,2,3-cd]pyrene	0.800	0.825		ug/L		103	70 - 130
N-Nitrosodimethylamine	0.800	0.458		ug/L		57	20 - 160
Pentachlorophenol	1.60	2.20		ug/L		137	20 - 160

Lab Sample ID: LCSD 460-548149/5-A
Matrix: Water
Analysis Batch: 548270

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 548149

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.773		ug/L		97	70 - 130	14	20
Benzo[a]pyrene	0.800	0.848		ug/L		106	70 - 130	11	20
Benzo[b]fluoranthene	0.800	0.785		ug/L		98	70 - 130	16	20
Bis(2-chloroethyl)ether	0.800	0.828		ug/L		103	70 - 130	8	20
Dibenz(a,h)anthracene	0.800	1.17	*	ug/L		147	70 - 130	8	20
Hexachlorobenzene	0.800	0.904		ug/L		113	70 - 130	7	20
Indeno[1,2,3-cd]pyrene	0.800	0.931		ug/L		116	70 - 130	12	20
N-Nitrosodimethylamine	0.800	0.454		ug/L		57	20 - 160	1	20

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

Lab Sample ID: LCSD 460-548149/5-A
Matrix: Water
Analysis Batch: 548270

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 548149

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol			1.60	2.49		ug/L		155	20 - 160	12	20

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 460-547674/1-A
Matrix: Water
Analysis Batch: 547927

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547674

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/27/18 08:04	08/28/18 01:20	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*45*		*10 - 150*	*08/27/18 08:04*	*08/28/18 01:20*	*1*

Lab Sample ID: LCS 460-547674/2-A
Matrix: Water
Analysis Batch: 547927

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547674

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane			1.60	1.89		ug/L		118	10 - 200

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*39*		*10 - 200*

Lab Sample ID: 460-163302-5 MS
Matrix: Water
Analysis Batch: 547927

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 547674

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.34		1.60	1.84		ug/L		94	70 - 130

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*31*		*10 - 150*

Lab Sample ID: 460-163302-5 MSD
Matrix: Water
Analysis Batch: 547927

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 547674

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.34		1.60	1.87		ug/L		96	70 - 130	2	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*30*		*10 - 150*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: MB 460-547677/1-A
Matrix: Water
Analysis Batch: 547993

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/27/18 08:13	08/28/18 09:30	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*42*		*10 - 150*	*08/27/18 08:13*	*08/28/18 09:30*	*1*

Lab Sample ID: LCS 460-547677/2-A
Matrix: Water
Analysis Batch: 547993

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547677

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			1.60	1.94		ug/L		121	10 - 200		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*41*		*10 - 200*

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 548328

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 547677

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	82		1.60	77.4	4	ug/L		-276	70 - 130		

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*19*		*10 - 150*

Lab Sample ID: 460-163302-21 MSD
Matrix: Water
Analysis Batch: 548328

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 547677

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	82		1.60	79.8	4	ug/L		-121	70 - 130	3	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*17*		*10 - 150*

Lab Sample ID: 460-163313-A-2-A MS
Matrix: Water
Analysis Batch: 547993

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 547677

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	0.38		1.60	2.02		ug/L		103	70 - 130		

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*23*		*10 - 150*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: 460-163313-B-2-A MSD
Matrix: Water
Analysis Batch: 547993

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 547677

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.38		1.60	2.06		ug/L		105	70 - 130	2	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*32*		*10 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 460-547718/1-A
Matrix: Water
Analysis Batch: 548111

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 547718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/28/18 23:32	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/28/18 23:32	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/28/18 23:32	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/28/18 23:32	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/28/18 23:32	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/27/18 09:27	08/28/18 23:32	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/28/18 23:32	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/28/18 23:32	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/28/18 23:32	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/27/18 09:27	08/28/18 23:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*30 - 150*	*08/27/18 09:27*	*08/28/18 23:32*	*1*
Tetrachloro-m-xylene	*63*		*30 - 150*	*08/27/18 09:27*	*08/28/18 23:32*	*1*
DCB Decachlorobiphenyl	*98*		*30 - 150*	*08/27/18 09:27*	*08/28/18 23:32*	*1*
DCB Decachlorobiphenyl	*69*		*30 - 150*	*08/27/18 09:27*	*08/28/18 23:32*	*1*

Lab Sample ID: LCS 460-547718/2-A
Matrix: Water
Analysis Batch: 548111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 547718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.33		ug/L		83	40 - 140
PCB-1016	4.00	3.68		ug/L		92	40 - 140
PCB-1260	4.00	3.91		ug/L		98	40 - 140
PCB-1260	4.00	3.91		ug/L		98	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*69*		*30 - 150*
Tetrachloro-m-xylene	*72*		*30 - 150*
DCB Decachlorobiphenyl	*86*		*30 - 150*
DCB Decachlorobiphenyl	*84*		*30 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 460-163302-5 MS
Matrix: Water
Analysis Batch: 548111

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 547718

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.12	U	4.00	4.26		ug/L		107	40 - 140
PCB-1260	0.11	U	4.00	4.52		ug/L		113	40 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*73*		*30 - 150*
Tetrachloro-m-xylene	*71*		*30 - 150*
DCB Decachlorobiphenyl	*77*		*30 - 150*
DCB Decachlorobiphenyl	*69*		*30 - 150*

Lab Sample ID: 460-163302-5 MSD
Matrix: Water
Analysis Batch: 548111

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 547718

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.12	U	4.00	4.05		ug/L		101	40 - 140	5	20
PCB-1260	0.11	U	4.00	4.24		ug/L		106	40 - 140	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*75*		*30 - 150*
Tetrachloro-m-xylene	*73*		*30 - 150*
DCB Decachlorobiphenyl	*67*		*30 - 150*
DCB Decachlorobiphenyl	*61*		*30 - 150*

Lab Sample ID: MB 460-548017/1-A
Matrix: Water
Analysis Batch: 548386

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548017

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 15:59	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 15:59	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 15:59	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 15:59	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 15:59	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/28/18 09:19	08/29/18 15:59	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 15:59	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 15:59	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 15:59	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/28/18 09:19	08/29/18 15:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*30 - 150*	*08/28/18 09:19*	*08/29/18 15:59*	*1*
Tetrachloro-m-xylene	*86*		*30 - 150*	*08/28/18 09:19*	*08/29/18 15:59*	*1*
DCB Decachlorobiphenyl	*101*		*30 - 150*	*08/28/18 09:19*	*08/29/18 15:59*	*1*
DCB Decachlorobiphenyl	*95*		*30 - 150*	*08/28/18 09:19*	*08/29/18 15:59*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 460-548017/2-A
Matrix: Water
Analysis Batch: 548386

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548017

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	4.54		ug/L		113	40 - 140		
PCB-1016			4.00	4.67		ug/L		117	40 - 140		
PCB-1260			4.00	5.10		ug/L		127	40 - 140		
PCB-1260			4.00	4.89		ug/L		122	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*91*		*30 - 150*
Tetrachloro-m-xylene	*92*		*30 - 150*
DCB Decachlorobiphenyl	*107*		*30 - 150*
DCB Decachlorobiphenyl	*102*		*30 - 150*

Lab Sample ID: 460-163352-M-6-A MSD
Matrix: Water
Analysis Batch: 548386

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 548017

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.12	U F1	4.00	0.12	U F1	ug/L		0	40 - 140	NC	20
PCB-1016	0.12	U F1	4.00	0.12	U F1	ug/L		0	40 - 140	NC	20
PCB-1260	0.11	U F1	4.00	0.11	U F1	ug/L		0	40 - 140	NC	20
PCB-1260	0.11	U F1	4.00	0.11	U F1	ug/L		0	40 - 140	NC	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*61*		*30 - 150*
Tetrachloro-m-xylene	*50*		*30 - 150*
DCB Decachlorobiphenyl	*33*		*30 - 150*
DCB Decachlorobiphenyl	*30*		*30 - 150*

Lab Sample ID: 460-163352-O-6-B MS
Matrix: Water
Analysis Batch: 548386

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 548017

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	0.12	U F1	4.00	0.12	U F1	ug/L		0	40 - 140		
PCB-1016	0.12	U F1	4.00	0.12	U F1	ug/L		0	40 - 140		
PCB-1260	0.11	U F1	4.00	0.11	U F1	ug/L		0	40 - 140		
PCB-1260	0.11	U F1	4.00	0.11	U F1	ug/L		0	40 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*58*		*30 - 150*
Tetrachloro-m-xylene	*50*		*30 - 150*
DCB Decachlorobiphenyl	*44*		*30 - 150*
DCB Decachlorobiphenyl	*36*		*30 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 460-548315/1-A
Matrix: Water
Analysis Batch: 548752

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548315

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/30/18 22:38	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/30/18 22:38	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/30/18 22:38	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/30/18 22:38	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/30/18 22:38	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/29/18 09:36	08/30/18 22:38	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/29/18 09:36	08/30/18 22:38	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/29/18 09:36	08/30/18 22:38	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/29/18 09:36	08/30/18 22:38	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/29/18 09:36	08/30/18 22:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*88*		*30 - 150*	*08/29/18 09:36*	*08/30/18 22:38*	*1*
Tetrachloro-m-xylene	*86*		*30 - 150*	*08/29/18 09:36*	*08/30/18 22:38*	*1*
DCB Decachlorobiphenyl	*103*		*30 - 150*	*08/29/18 09:36*	*08/30/18 22:38*	*1*
DCB Decachlorobiphenyl	*95*		*30 - 150*	*08/29/18 09:36*	*08/30/18 22:38*	*1*

Lab Sample ID: LCS 460-548315/2-A
Matrix: Water
Analysis Batch: 548752

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548315

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	4.52		ug/L		113	40 - 140
PCB-1016	4.00	4.59		ug/L		115	40 - 140
PCB-1260	4.00	5.04		ug/L		126	40 - 140
PCB-1260	4.00	4.73		ug/L		118	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*90*		*30 - 150*
Tetrachloro-m-xylene	*91*		*30 - 150*
DCB Decachlorobiphenyl	*105*		*30 - 150*
DCB Decachlorobiphenyl	*100*		*30 - 150*

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 548752

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 548315

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.12	U	4.00	3.65		ug/L		91	40 - 140
PCB-1016	0.12	U	4.00	4.14		ug/L		104	40 - 140
PCB-1260	0.11	U	4.00	3.59		ug/L		90	40 - 140
PCB-1260	0.11	U	4.00	3.69		ug/L		92	40 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*62*		*30 - 150*
Tetrachloro-m-xylene	*67*		*30 - 150*
DCB Decachlorobiphenyl	*32*		*30 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 548752

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 548315

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	34		30 - 150

Lab Sample ID: 460-163302-21 MSD
Matrix: Water
Analysis Batch: 548752

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 548315

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.12	U	4.00	3.98		ug/L		100	40 - 140	9	20
PCB-1016	0.12	U	4.00	4.13		ug/L		103	40 - 140	0	20
PCB-1260	0.11	U	4.00	3.95		ug/L		99	40 - 140	7	20
PCB-1260	0.11	U	4.00	3.69		ug/L		92	40 - 140	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	66		30 - 150
Tetrachloro-m-xylene	67		30 - 150
DCB Decachlorobiphenyl	38		30 - 150
DCB Decachlorobiphenyl	37		30 - 150

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 460-547563/3
Matrix: Water
Analysis Batch: 547563

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/26/18 16:09	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/26/18 16:09	1

Lab Sample ID: LCS 460-547563/5
Matrix: Water
Analysis Batch: 547563

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.531		mg/L		102	90 - 110
Sulfate	7.50	7.582		mg/L		101	90 - 110

Lab Sample ID: LCSD 460-547563/6
Matrix: Water
Analysis Batch: 547563

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.50	1.606		mg/L		107	90 - 110	5	15
Sulfate	7.50	7.951		mg/L		106	90 - 110	5	15

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 460-163302-5 MS
Matrix: Water
Analysis Batch: 547563

Client Sample ID: CMS-50-082318
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	6.63		7.50	14.12		mg/L		100	90 - 110

Lab Sample ID: 460-163302-5 MSD
Matrix: Water
Analysis Batch: 547563

Client Sample ID: CMS-50-082318
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	6.63		7.50	14.20		mg/L		101	90 - 110	1	15

Lab Sample ID: 460-163302-22 MS
Matrix: Water
Analysis Batch: 547563

Client Sample ID: SC-01-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.97		1.50	3.504		mg/L		102	90 - 110
Sulfate	0.62		7.50	7.909		mg/L		97	90 - 110

Lab Sample ID: 460-163302-22 MSD
Matrix: Water
Analysis Batch: 547563

Client Sample ID: SC-01-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.97		1.50	3.524		mg/L		103	90 - 110	1	15
Sulfate	0.62		7.50	7.749		mg/L		95	90 - 110	2	15

Lab Sample ID: 460-163302-5 DU
Matrix: Water
Analysis Batch: 547563

Client Sample ID: CMS-50-082318
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	6.63		6.627		mg/L		0.06	15

Lab Sample ID: 460-163302-22 DU
Matrix: Water
Analysis Batch: 547563

Client Sample ID: SC-01-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	1.97		2.033		mg/L		3	15
Sulfate	0.62		0.614		mg/L		0.1	15

Lab Sample ID: MB 460-547565/3
Matrix: Water
Analysis Batch: 547565

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/26/18 19:58	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/26/18 19:58	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 460-547565/5
Matrix: Water
Analysis Batch: 547565

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			1.50	1.461		mg/L		97	90 - 110		
Sulfate			7.50	7.532		mg/L		100	90 - 110		

Lab Sample ID: LCSD 460-547565/6
Matrix: Water
Analysis Batch: 547565

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			1.50	1.460		mg/L		97	90 - 110	0	15
Sulfate			7.50	7.498		mg/L		100	90 - 110	0	15

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 547565

Client Sample ID: PMS-230-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	0.33	U	7.50	7.461		mg/L		99	90 - 110		

Lab Sample ID: 460-163302-21 MSD
Matrix: Water
Analysis Batch: 547565

Client Sample ID: PMS-230-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	0.33	U	7.50	7.559		mg/L		101	90 - 110	1	15

Lab Sample ID: 460-163302-21 DU
Matrix: Water
Analysis Batch: 547565

Client Sample ID: PMS-230-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	0.33	U	0.33	U	mg/L		NC	15

Lab Sample ID: MB 460-547726/3
Matrix: Water
Analysis Batch: 547726

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/27/18 12:25	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/27/18 12:25	1

Lab Sample ID: LCS 460-547726/5
Matrix: Water
Analysis Batch: 547726

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			1.50	1.455		mg/L		97	90 - 110		
Sulfate			7.50	7.479		mg/L		100	90 - 110		

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 460-547726/6
Matrix: Water
Analysis Batch: 547726

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			1.50	1.443		mg/L		96	90 - 110	1	15
Sulfate			7.50	7.445		mg/L		99	90 - 110	0	15

Lab Sample ID: MB 460-547825/3
Matrix: Water
Analysis Batch: 547825

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/27/18 20:15	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/27/18 20:15	1

Lab Sample ID: LCS 460-547825/5
Matrix: Water
Analysis Batch: 547825

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			1.50	1.452		mg/L		97	90 - 110		
Sulfate			7.50	7.484		mg/L		100	90 - 110		

Lab Sample ID: LCSD 460-547825/6
Matrix: Water
Analysis Batch: 547825

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			1.50	1.456		mg/L		97	90 - 110	0	15
Sulfate			7.50	7.488		mg/L		100	90 - 110	0	15

Method: 9056A - Anions, Ion Chromatography - DL

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 547726

Client Sample ID: PMS-230-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride - DL	10.3	D	1.50	11.11	4	mg/L		56	90 - 110		

Lab Sample ID: 460-163302-21 MSD
Matrix: Water
Analysis Batch: 547726

Client Sample ID: PMS-230-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride - DL	10.3	D	1.50	11.35	4	mg/L		72	90 - 110	2	15

Lab Sample ID: 460-163302-21 DU
Matrix: Water
Analysis Batch: 547726

Client Sample ID: PMS-230-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	10.3	D	10.52		mg/L		2	15

Method: 9056A - Anions, Ion Chromatography - DL (Continued)

Lab Sample ID: 460-163302-5 MS
Matrix: Water
Analysis Batch: 547825

Client Sample ID: CMS-50-082318
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride - DL	184	D	0.0750	175.1	4	mg/L		-11834	90 - 110		

Lab Sample ID: 460-163302-5 MSD
Matrix: Water
Analysis Batch: 547825

Client Sample ID: CMS-50-082318
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride - DL	184	D	0.0750	173.5	4	mg/L		-13964	90 - 110	1	15

Lab Sample ID: 460-163302-5 DU
Matrix: Water
Analysis Batch: 547825

Client Sample ID: CMS-50-082318
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	184	D	181.3		mg/L		1	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: LCS 460-548508/2-A
Matrix: Water
Analysis Batch: 548548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548508

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.00	4.56		ug/L		91	80 - 120
Arsenic	10.0	10.65		ug/L		107	80 - 120
Barium	10.0	9.38		ug/L		94	80 - 120
Beryllium	5.00	4.83		ug/L		97	80 - 120
Cadmium	5.00	4.46		ug/L		89	80 - 120
Chromium	10.0	8.92		ug/L		89	80 - 120
Manganese	50.0	47.33		ug/L		95	80 - 120
Lead	5.00	4.67		ug/L		93	80 - 120
Antimony	5.00	4.04		ug/L		81	80 - 120
Selenium	10.0	9.56		ug/L		96	80 - 120
Vanadium	10.0	9.02		ug/L		90	80 - 120
Zinc	50.0	45.21		ug/L		90	80 - 120
Aluminum	500	464.8		ug/L		93	80 - 120
Sodium	500	445.6		ug/L		89	80 - 120
Magnesium	500	446.4		ug/L		89	80 - 120
Potassium	500	512.5		ug/L		103	80 - 120
Calcium	500	510.7		ug/L		102	80 - 120
Iron	500	459.9		ug/L		92	80 - 120
Thallium	4.00	3.77		ug/L		94	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-548508/2-A
Matrix: Water
Analysis Batch: 548676

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548508

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	5.00	4.55		ug/L		91	80 - 120
Copper	10.0	8.86		ug/L		89	80 - 120
Nickel	10.0	8.83		ug/L		88	80 - 120

Lab Sample ID: MB 460-548509/1-A ^2
Matrix: Water
Analysis Batch: 548831

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548509

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 00:10	08/31/18 00:03	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 00:10	08/31/18 00:03	2
Barium	1.1	U	4.0	1.1	ug/L		08/30/18 00:10	08/31/18 00:03	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 00:10	08/31/18 00:03	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 00:10	08/31/18 00:03	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 00:10	08/31/18 00:03	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 00:10	08/31/18 00:03	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 00:10	08/31/18 00:03	2
Manganese	2.7	U	8.0	2.7	ug/L		08/30/18 00:10	08/31/18 00:03	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 00:10	08/31/18 00:03	2
Lead	0.37	U	1.2	0.37	ug/L		08/30/18 00:10	08/31/18 00:03	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 00:10	08/31/18 00:03	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 00:10	08/31/18 00:03	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 00:10	08/31/18 00:03	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 00:10	08/31/18 00:03	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 00:10	08/31/18 00:03	2
Sodium	75.7	U	200	75.7	ug/L		08/30/18 00:10	08/31/18 00:03	2
Magnesium	65.7	U	200	65.7	ug/L		08/30/18 00:10	08/31/18 00:03	2
Potassium	64.9	U	200	64.9	ug/L		08/30/18 00:10	08/31/18 00:03	2
Calcium	67.6	U	200	67.6	ug/L		08/30/18 00:10	08/31/18 00:03	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 00:10	08/31/18 00:03	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 00:10	08/31/18 00:03	2

Lab Sample ID: LCS 460-548509/2-A ^2
Matrix: Water
Analysis Batch: 548831

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548509

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	24.30		ug/L		97	80 - 120
Arsenic	50.0	44.93		ug/L		90	80 - 120
Barium	50.0	52.03		ug/L		104	80 - 120
Beryllium	25.0	25.22		ug/L		101	80 - 120
Cadmium	25.0	23.92		ug/L		96	80 - 120
Cobalt	25.0	23.50		ug/L		94	80 - 120
Chromium	50.0	47.11		ug/L		94	80 - 120
Copper	50.0	50.84		ug/L		102	80 - 120
Manganese	250	249.0		ug/L		100	80 - 120
Nickel	50.0	47.23		ug/L		94	80 - 120
Lead	25.0	25.06		ug/L		100	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-548509/2-A ^2
Matrix: Water
Analysis Batch: 548831

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548509

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	25.0	25.92		ug/L		104	80 - 120
Selenium	50.0	41.77		ug/L		84	80 - 120
Vanadium	50.0	46.62		ug/L		93	80 - 120
Zinc	250	223.8		ug/L		90	80 - 120
Aluminum	2500	2433		ug/L		97	80 - 120
Sodium	2500	2469		ug/L		99	80 - 120
Magnesium	2500	2437		ug/L		97	80 - 120
Potassium	2500	2501		ug/L		100	80 - 120
Calcium	2500	2599		ug/L		104	80 - 120
Iron	2500	2426		ug/L		97	80 - 120
Thallium	20.0	19.95		ug/L		100	80 - 120

Lab Sample ID: 460-163302-5 MS
Matrix: Water
Analysis Batch: 548831

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 548509

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	25.0	22.75		ug/L		91	75 - 125
Arsenic	0.77	U	50.0	40.27		ug/L		81	75 - 125
Barium	66.3		50.0	114.6		ug/L		96	75 - 125
Beryllium	0.26	U	25.0	24.67		ug/L		99	75 - 125
Cadmium	0.61	U	25.0	23.24		ug/L		93	75 - 125
Cobalt	1.3	U	25.0	22.62		ug/L		90	75 - 125
Chromium	1.3	U	50.0	46.00		ug/L		92	75 - 125
Copper	3.1	J	50.0	45.90		ug/L		86	75 - 125
Manganese	776		250	978.8		ug/L		81	75 - 125
Nickel	1.4	J	50.0	45.34		ug/L		88	75 - 125
Lead	0.42	J	25.0	25.08		ug/L		99	75 - 125
Antimony	1.5	J	25.0	25.73		ug/L		97	75 - 125
Selenium	0.69	U	50.0	39.39		ug/L		79	75 - 125
Vanadium	1.2	U	50.0	46.18		ug/L		92	75 - 125
Zinc	326		250	527.2		ug/L		81	75 - 125
Aluminum	15.0	U	2500	2361		ug/L		94	75 - 125
Sodium	92400		2500	91870	4	ug/L		-20	75 - 125
Magnesium	14700		2500	16350	4	ug/L		66	75 - 125
Potassium	2280		2500	4629		ug/L		94	75 - 125
Calcium	51000		2500	51660	4	ug/L		27	75 - 125
Iron	14500		2500	16060	4	ug/L		64	75 - 125
Thallium	0.24	U	20.0	20.03		ug/L		100	75 - 125

Lab Sample ID: 460-163302-5 DU
Matrix: Water
Analysis Batch: 548831

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 548509

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	0.77	U	0.77	U	ug/L		NC	20
Barium	66.3		66.46		ug/L		0.2	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163302-5 DU
Matrix: Water
Analysis Batch: 548831

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 548509

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Cadmium	0.61	U		0.61	U	ug/L				NC	20
Cobalt	1.3	U		1.3	U	ug/L				NC	20
Chromium	1.3	U		1.3	U	ug/L				NC	20
Copper	3.1	J		1.9	U	ug/L				NC	20
Manganese	776			793.8		ug/L				2	20
Nickel	1.4	J		1.31	J	ug/L				4	20
Lead	0.42	J		0.454	J	ug/L				8	20
Antimony	1.5	J		1.60	J	ug/L				8	20
Selenium	0.69	U		0.69	U	ug/L				NC	20
Vanadium	1.2	U		1.2	U	ug/L				NC	20
Zinc	326			338.2		ug/L				4	20
Aluminum	15.0	U		15.0	U	ug/L				NC	20
Sodium	92400			95060		ug/L				3	20
Magnesium	14700			15120		ug/L				3	20
Potassium	2280			2339		ug/L				2	20
Calcium	51000			52440		ug/L				3	20
Iron	14500			14740		ug/L				2	20
Thallium	0.24	U		0.24	U	ug/L				NC	20

Lab Sample ID: MB 460-548512/1-A ^2
Matrix: Water
Analysis Batch: 548687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548512

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		08/30/18 00:50	08/30/18 20:22	2
Arsenic	0.77	U	2.0	0.77	ug/L		08/30/18 00:50	08/30/18 20:22	2
Barium	1.1	U	4.0	1.1	ug/L		08/30/18 00:50	08/30/18 20:22	2
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 00:50	08/30/18 20:22	2
Cadmium	0.61	U	2.0	0.61	ug/L		08/30/18 00:50	08/30/18 20:22	2
Cobalt	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 20:22	2
Chromium	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 20:22	2
Copper	1.9	U	4.0	1.9	ug/L		08/30/18 00:50	08/30/18 20:22	2
Manganese	2.7	U	8.0	2.7	ug/L		08/30/18 00:50	08/30/18 20:22	2
Nickel	1.3	U	4.0	1.3	ug/L		08/30/18 00:50	08/30/18 20:22	2
Lead	0.400	J	1.2	0.37	ug/L		08/30/18 00:50	08/30/18 20:22	2
Antimony	0.62	U	2.0	0.62	ug/L		08/30/18 00:50	08/30/18 20:22	2
Selenium	0.69	U	10.0	0.69	ug/L		08/30/18 00:50	08/30/18 20:22	2
Vanadium	1.2	U	4.0	1.2	ug/L		08/30/18 00:50	08/30/18 20:22	2
Zinc	5.4	U	16.0	5.4	ug/L		08/30/18 00:50	08/30/18 20:22	2
Aluminum	15.0	U	40.0	15.0	ug/L		08/30/18 00:50	08/30/18 20:22	2
Sodium	75.7	U	200	75.7	ug/L		08/30/18 00:50	08/30/18 20:22	2
Magnesium	65.7	U	200	65.7	ug/L		08/30/18 00:50	08/30/18 20:22	2
Potassium	64.9	U	200	64.9	ug/L		08/30/18 00:50	08/30/18 20:22	2
Calcium	67.6	U	200	67.6	ug/L		08/30/18 00:50	08/30/18 20:22	2
Iron	45.7	U	120	45.7	ug/L		08/30/18 00:50	08/30/18 20:22	2
Thallium	0.24	U	0.80	0.24	ug/L		08/30/18 00:50	08/30/18 20:22	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-548512/2-A ^2
Matrix: Water
Analysis Batch: 548687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548512

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	25.76		ug/L		103	80 - 120
Arsenic	50.0	51.70		ug/L		103	80 - 120
Barium	50.0	52.29		ug/L		105	80 - 120
Beryllium	25.0	24.97		ug/L		100	80 - 120
Cadmium	25.0	24.39		ug/L		98	80 - 120
Cobalt	25.0	25.39		ug/L		102	80 - 120
Chromium	50.0	51.09		ug/L		102	80 - 120
Copper	50.0	56.72		ug/L		113	80 - 120
Manganese	250	252.7		ug/L		101	80 - 120
Nickel	50.0	51.03		ug/L		102	80 - 120
Lead	25.0	26.00		ug/L		104	80 - 120
Antimony	25.0	26.28		ug/L		105	80 - 120
Selenium	50.0	47.86		ug/L		96	80 - 120
Vanadium	50.0	50.80		ug/L		102	80 - 120
Zinc	250	242.2		ug/L		97	80 - 120
Aluminum	2500	2417		ug/L		97	80 - 120
Sodium	2500	2665		ug/L		107	80 - 120
Magnesium	2500	2564		ug/L		103	80 - 120
Potassium	2500	2557		ug/L		102	80 - 120
Calcium	2500	2679		ug/L		107	80 - 120
Iron	2500	2504		ug/L		100	80 - 120
Thallium	20.0	20.40		ug/L		102	80 - 120

Lab Sample ID: 460-163407-J-1-C MS ^10
Matrix: Water
Analysis Batch: 548986

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 548512

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	404000		2500	410500	4	ug/L		270	75 - 125

Lab Sample ID: 460-163407-J-1-C MS ^2
Matrix: Water
Analysis Batch: 548687

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 548512

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	25.0	25.34		ug/L		101	75 - 125
Arsenic	38.8		50.0	86.37		ug/L		95	75 - 125
Barium	99.4		50.0	155.5		ug/L		112	75 - 125
Beryllium	0.26	U	25.0	24.11		ug/L		96	75 - 125
Cadmium	0.61	U	25.0	24.75		ug/L		99	75 - 125
Cobalt	1.4	J	25.0	25.41		ug/L		96	75 - 125
Chromium	9.6		50.0	57.91		ug/L		97	75 - 125
Copper	5.5		50.0	52.84		ug/L		95	75 - 125
Manganese	5460		250	5696	4	ug/L		93	75 - 125
Nickel	10.3		50.0	57.24		ug/L		94	75 - 125
Lead	0.37	U	25.0	26.60		ug/L		106	75 - 125
Antimony	0.64	J	25.0	26.89		ug/L		105	75 - 125
Selenium	2.1	J	50.0	48.47		ug/L		93	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163407-J-1-C MS ^2
Matrix: Water
Analysis Batch: 548687

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 548512

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	10.1		50.0	60.54		ug/L		101	75 - 125
Zinc	45.1		250	258.1		ug/L		85	75 - 125
Aluminum	46.3		2500	2351		ug/L		92	75 - 125
Sodium	188000		2500	189200	4	ug/L		60	75 - 125
Magnesium	228000		2500	230000	4	ug/L		68	75 - 125
Potassium	13300		2500	15870	4	ug/L		101	75 - 125
Iron	108	J	2500	2489		ug/L		95	75 - 125
Thallium	0.24	U	20.0	21.13		ug/L		106	75 - 125

Lab Sample ID: 460-163407-J-1-B DU ^10
Matrix: Water
Analysis Batch: 548986

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 548512

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Calcium	404000		400200		ug/L		0.9	20

Lab Sample ID: 460-163407-J-1-B DU ^2
Matrix: Water
Analysis Batch: 548687

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 548512

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	38.8		42.03		ug/L		8	20
Barium	99.4		108.5		ug/L		9	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	1.4	J	1.50	J	ug/L		5	20
Chromium	9.6		10.09		ug/L		5	20
Copper	5.5		14.90	F3	ug/L		92	20
Manganese	5460		5689		ug/L		4	20
Nickel	10.3		11.24		ug/L		9	20
Lead	0.37	U	0.406	J	ug/L		NC	20
Antimony	0.64	J	0.718	J	ug/L		12	20
Selenium	2.1	J	2.21	J	ug/L		6	20
Vanadium	10.1		10.74		ug/L		6	20
Zinc	45.1		47.64		ug/L		6	20
Aluminum	46.3		49.09		ug/L		6	20
Sodium	188000		196600		ug/L		5	20
Magnesium	228000		238100		ug/L		4	20
Potassium	13300		13990		ug/L		5	20
Iron	108	J	119.4	J	ug/L		10	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Lab Sample ID: MB 460-548513/1-A ^2
Matrix: Water
Analysis Batch: 548986

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548513

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.26	U	0.80	0.26	ug/L		08/30/18 01:40	08/31/18 14:27	2

Lab Sample ID: LCS 460-548513/2-A ^2
Matrix: Water
Analysis Batch: 548986

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548513

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	25.0	25.70		ug/L		103	80 - 120

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 548986

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 548513

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.26	U	25.0	26.49		ug/L		106	75 - 125

Lab Sample ID: 460-163302-21 DU
Matrix: Water
Analysis Batch: 548986

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 548513

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Beryllium	0.26	U	0.26	U	ug/L		NC	20

Lab Sample ID: LCS 460-548641/2-A
Matrix: Water
Analysis Batch: 548948

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548641

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	500	500.9		ug/L		100	80 - 120
Potassium	500	509.8		ug/L		102	80 - 120

Lab Sample ID: MB 460-549147/1-A ^2
Matrix: Water
Analysis Batch: 549568

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/01/18 04:28	09/05/18 02:58	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/01/18 04:28	09/05/18 02:58	2
Barium	1.1	U	4.0	1.1	ug/L		09/01/18 04:28	09/05/18 02:58	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/01/18 04:28	09/05/18 02:58	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 02:58	2
Chromium	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 02:58	2
Copper	1.9	U	4.0	1.9	ug/L		09/01/18 04:28	09/05/18 02:58	2
Manganese	2.7	U	8.0	2.7	ug/L		09/01/18 04:28	09/05/18 02:58	2
Nickel	1.3	U	4.0	1.3	ug/L		09/01/18 04:28	09/05/18 02:58	2
Lead	0.37	U	1.2	0.37	ug/L		09/01/18 04:28	09/05/18 02:58	2
Antimony	0.62	U	2.0	0.62	ug/L		09/01/18 04:28	09/05/18 02:58	2
Selenium	0.69	U	10.0	0.69	ug/L		09/01/18 04:28	09/05/18 02:58	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/01/18 04:28	09/05/18 02:58	2
Zinc	5.4	U	16.0	5.4	ug/L		09/01/18 04:28	09/05/18 02:58	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/01/18 04:28	09/05/18 02:58	2
Sodium	75.7	U	200	75.7	ug/L		09/01/18 04:28	09/05/18 02:58	2
Magnesium	65.7	U	200	65.7	ug/L		09/01/18 04:28	09/05/18 02:58	2
Potassium	64.9	U	200	64.9	ug/L		09/01/18 04:28	09/05/18 02:58	2
Calcium	67.6	U	200	67.6	ug/L		09/01/18 04:28	09/05/18 02:58	2
Iron	45.7	U	120	45.7	ug/L		09/01/18 04:28	09/05/18 02:58	2
Thallium	0.24	U	0.80	0.24	ug/L		09/01/18 04:28	09/05/18 02:58	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-549147/2-A ^2
Matrix: Water
Analysis Batch: 549568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	25.94		ug/L		104	80 - 120
Arsenic	50.0	51.79		ug/L		104	80 - 120
Barium	50.0	49.11		ug/L		98	80 - 120
Cadmium	25.0	25.03		ug/L		100	80 - 120
Cobalt	25.0	25.04		ug/L		100	80 - 120
Chromium	50.0	50.90		ug/L		102	80 - 120
Copper	50.0	55.21		ug/L		110	80 - 120
Manganese	250	252.1		ug/L		101	80 - 120
Nickel	50.0	51.42		ug/L		103	80 - 120
Lead	25.0	25.22		ug/L		101	80 - 120
Antimony	25.0	25.26		ug/L		101	80 - 120
Selenium	50.0	47.72		ug/L		95	80 - 120
Vanadium	50.0	49.99		ug/L		100	80 - 120
Zinc	250	239.7		ug/L		96	80 - 120
Aluminum	2500	2398		ug/L		96	80 - 120
Sodium	2500	2708		ug/L		108	80 - 120
Magnesium	2500	2489		ug/L		100	80 - 120
Potassium	2500	2555		ug/L		102	80 - 120
Calcium	2500	2638		ug/L		106	80 - 120
Iron	2500	2669		ug/L		107	80 - 120
Thallium	20.0	20.01		ug/L		100	80 - 120

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 549568

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 549147

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	25.0	27.18		ug/L		109	75 - 125
Arsenic	4.1		50.0	53.34		ug/L		99	75 - 125
Barium	499		50.0	591.3	4	ug/L		184	75 - 125
Cadmium	0.61	U	25.0	25.81		ug/L		103	75 - 125
Cobalt	2.4	J	25.0	28.43		ug/L		104	75 - 125
Chromium	9.0		50.0	61.76		ug/L		106	75 - 125
Copper	13.2		50.0	66.15		ug/L		106	75 - 125
Manganese	1990		250	2362	4	ug/L		149	75 - 125
Nickel	4.8		50.0	56.72		ug/L		104	75 - 125
Lead	54.5		25.0	85.60		ug/L		124	75 - 125
Antimony	0.80	J	25.0	27.13		ug/L		105	75 - 125
Selenium	0.69	U	50.0	48.15		ug/L		96	75 - 125
Vanadium	4.0		50.0	57.35		ug/L		107	75 - 125
Zinc	669		250	948.2		ug/L		112	75 - 125
Aluminum	41.4		2500	2512		ug/L		99	75 - 125
Sodium	30200		2500	34490	4	ug/L		171	75 - 125
Magnesium	11600		2500	14820	4	ug/L		127	75 - 125
Potassium	7700		2500	10730		ug/L		121	75 - 125
Calcium	96000		2500	104300	4	ug/L		334	75 - 125
Iron	134000		2500	142500	4	ug/L		353	75 - 125
Thallium	0.24	U	20.0	21.68		ug/L		108	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163302-21 DU
Matrix: Water
Analysis Batch: 549568

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 549147

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Silver	1.4	U		1.4	U	ug/L				NC	20
Arsenic	4.1			4.35		ug/L				6	20
Barium	499			539.3		ug/L				8	20
Cadmium	0.61	U		0.61	U	ug/L				NC	20
Cobalt	2.4	J		2.46	J	ug/L				3	20
Chromium	9.0			9.36		ug/L				4	20
Copper	13.2			13.55		ug/L				2	20
Manganese	1990			2120		ug/L				6	20
Nickel	4.8			5.15		ug/L				7	20
Lead	54.5			58.56		ug/L				7	20
Antimony	0.80	J		0.960	J	ug/L				19	20
Selenium	0.69	U		0.69	U	ug/L				NC	20
Vanadium	4.0			4.31		ug/L				9	20
Zinc	669			709.7		ug/L				6	20
Aluminum	41.4			45.26		ug/L				9	20
Sodium	30200			32230		ug/L				6	20
Magnesium	11600			12380		ug/L				6	20
Potassium	7700			8150		ug/L				6	20
Calcium	96000			101500		ug/L				6	20
Iron	134000			141400		ug/L				6	20
Thallium	0.24	U		0.24	U	ug/L				NC	20

Lab Sample ID: MB 460-550221/1-A ^2
Matrix: Water
Analysis Batch: 550760

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550221

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/06/18 23:55	09/08/18 23:20	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/06/18 23:55	09/08/18 23:20	2
Barium	1.1	U	4.0	1.1	ug/L		09/06/18 23:55	09/08/18 23:20	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/06/18 23:55	09/08/18 23:20	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/06/18 23:55	09/08/18 23:20	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/06/18 23:55	09/08/18 23:20	2
Chromium	1.3	U	4.0	1.3	ug/L		09/06/18 23:55	09/08/18 23:20	2
Copper	1.9	U	4.0	1.9	ug/L		09/06/18 23:55	09/08/18 23:20	2
Manganese	2.7	U	8.0	2.7	ug/L		09/06/18 23:55	09/08/18 23:20	2
Nickel	1.3	U	4.0	1.3	ug/L		09/06/18 23:55	09/08/18 23:20	2
Lead	0.37	U	1.2	0.37	ug/L		09/06/18 23:55	09/08/18 23:20	2
Antimony	0.62	U	2.0	0.62	ug/L		09/06/18 23:55	09/08/18 23:20	2
Selenium	0.69	U	10.0	0.69	ug/L		09/06/18 23:55	09/08/18 23:20	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/06/18 23:55	09/08/18 23:20	2
Zinc	5.4	U	16.0	5.4	ug/L		09/06/18 23:55	09/08/18 23:20	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/06/18 23:55	09/08/18 23:20	2
Sodium	75.7	U	200	75.7	ug/L		09/06/18 23:55	09/08/18 23:20	2
Magnesium	65.7	U	200	65.7	ug/L		09/06/18 23:55	09/08/18 23:20	2
Potassium	64.9	U	200	64.9	ug/L		09/06/18 23:55	09/08/18 23:20	2
Calcium	67.6	U	200	67.6	ug/L		09/06/18 23:55	09/08/18 23:20	2
Iron	45.7	U	120	45.7	ug/L		09/06/18 23:55	09/08/18 23:20	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-550221/1-A ^2
Matrix: Water
Analysis Batch: 550760

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550221

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.24	U	0.80	0.24	ug/L		09/06/18 23:55	09/08/18 23:20	2

Lab Sample ID: LCS 460-550221/2-A ^2
Matrix: Water
Analysis Batch: 550921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550221

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	25.10		ug/L		100	80 - 120
Arsenic	50.0	54.09		ug/L		108	80 - 120
Barium	50.0	49.98		ug/L		100	80 - 120
Beryllium	25.0	23.90		ug/L		96	80 - 120
Cadmium	25.0	24.34		ug/L		97	80 - 120
Cobalt	25.0	25.27		ug/L		101	80 - 120
Chromium	50.0	50.67		ug/L		101	80 - 120
Copper	50.0	51.11		ug/L		102	80 - 120
Manganese	250	252.0		ug/L		101	80 - 120
Nickel	50.0	50.90		ug/L		102	80 - 120
Lead	25.0	25.21		ug/L		101	80 - 120
Antimony	25.0	26.47		ug/L		106	80 - 120
Selenium	50.0	51.75		ug/L		104	80 - 120
Vanadium	50.0	51.26		ug/L		103	80 - 120
Zinc	250	248.5		ug/L		99	80 - 120
Aluminum	2500	2543		ug/L		102	80 - 120
Sodium	2500	2667		ug/L		107	80 - 120
Magnesium	2500	2552		ug/L		102	80 - 120
Potassium	2500	2525		ug/L		101	80 - 120
Calcium	2500	2678		ug/L		107	80 - 120
Iron	2500	2519		ug/L		101	80 - 120
Thallium	20.0	20.08		ug/L		100	80 - 120

Lab Sample ID: 460-163794-J-2-C MS ^2
Matrix: Water
Analysis Batch: 550760

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 550221

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	25.0	26.67		ug/L		107	75 - 125
Barium	42.2		50.0	94.01		ug/L		104	75 - 125
Beryllium	0.26	U	25.0	25.60		ug/L		102	75 - 125
Cadmium	0.61	U	25.0	25.76		ug/L		103	75 - 125
Cobalt	1.3	U	25.0	26.58		ug/L		106	75 - 125
Chromium	1.3	U	50.0	53.43		ug/L		107	75 - 125
Copper	3.8	J	50.0	53.36		ug/L		99	75 - 125
Manganese	3960		250	4335	4	ug/L		152	75 - 125
Nickel	2.3	J	50.0	54.34		ug/L		104	75 - 125
Antimony	5.6	*	25.0	33.39		ug/L		111	75 - 125
Selenium	0.69	U	50.0	49.67		ug/L		99	75 - 125
Vanadium	1.2	U	50.0	53.03		ug/L		106	75 - 125
Zinc	13.4	J	250	262.0		ug/L		99	75 - 125
Aluminum	23.1	J	2500	2588		ug/L		103	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163794-J-2-C MS ^2
Matrix: Water
Analysis Batch: 550760

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 550221

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	87000		2500	91260	4	ug/L		172	75 - 125
Magnesium	22900		2500	24730	4	ug/L		74	75 - 125
Potassium	2820		2500	5415		ug/L		104	75 - 125
Calcium	61300		2500	65150	4	ug/L		154	75 - 125
Iron	33000		2500	36370	4	ug/L		136	75 - 125
Thallium	0.24	U	20.0	21.36		ug/L		107	75 - 125

Lab Sample ID: 460-163794-J-2-B DU ^2
Matrix: Water
Analysis Batch: 550760

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 550221

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Barium	42.2		44.43		ug/L		5	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	1.3	U	1.3	U	ug/L		NC	20
Chromium	1.3	U	1.3	U	ug/L		NC	20
Copper	3.8	J	1.9	U	ug/L		NC	20
Manganese	3960		4144		ug/L		5	20
Nickel	2.3	J	2.21	J	ug/L		5	20
Lead	12.6	F1	0.37	U	ug/L		NC	20
Selenium	0.69	U	0.69	U	ug/L		NC	20
Vanadium	1.2	U	1.2	U	ug/L		NC	20
Zinc	13.4	J	5.46	J F5	ug/L		84	20
Aluminum	23.1	J	19.04	J	ug/L		19	20
Sodium	87000		90720		ug/L		4	20
Magnesium	22900		23890		ug/L		4	20
Potassium	2820		2933		ug/L		4	20
Calcium	61300		63520		ug/L		4	20
Iron	33000		34250		ug/L		4	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Lab Sample ID: LCS 460-552068/2-A
Matrix: Water
Analysis Batch: 551988

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 552068

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.00	5.29		ug/L		106	80 - 120
Arsenic	10.0	10.47		ug/L		105	80 - 120
Barium	10.0	9.97		ug/L		100	80 - 120
Beryllium	5.00	4.66		ug/L		93	80 - 120
Cadmium	5.00	4.89		ug/L		98	80 - 120
Cobalt	5.00	4.80		ug/L		96	80 - 120
Chromium	10.0	9.97		ug/L		100	80 - 120
Copper	10.0	9.96		ug/L		100	80 - 120
Manganese	50.0	51.24		ug/L		102	80 - 120
Nickel	10.0	9.99		ug/L		100	80 - 120
Lead	5.00	5.09		ug/L		102	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-552068/2-A
Matrix: Water
Analysis Batch: 551988

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 552068

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	5.00	4.89		ug/L		98	80 - 120
Selenium	10.0	10.37		ug/L		104	80 - 120
Vanadium	10.0	9.79		ug/L		98	80 - 120
Zinc	50.0	49.97		ug/L		100	80 - 120
Aluminum	500	524.0		ug/L		105	80 - 120
Magnesium	500	522.5		ug/L		104	80 - 120
Calcium	500	525.0		ug/L		105	80 - 120
Iron	500	547.1		ug/L		109	80 - 120
Thallium	4.00	4.03		ug/L		101	80 - 120

Lab Sample ID: MB 460-548327/1-B
Matrix: Water
Analysis Batch: 548548

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 548508

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.68	U	1.0	0.68	ug/L		08/30/18 01:59	08/30/18 03:08	1
Arsenic	0.38	U	1.0	0.38	ug/L		08/30/18 01:59	08/30/18 03:08	1
Barium	0.57	U	2.0	0.57	ug/L		08/30/18 01:59	08/30/18 03:08	1
Beryllium	0.13	U	0.40	0.13	ug/L		08/30/18 01:59	08/30/18 03:08	1
Cadmium	0.31	U	1.0	0.31	ug/L		08/30/18 01:59	08/30/18 03:08	1
Chromium	0.66	U	2.0	0.66	ug/L		08/30/18 01:59	08/30/18 03:08	1
Manganese	1.3	U	4.0	1.3	ug/L		08/30/18 01:59	08/30/18 03:08	1
Lead	0.19	U	0.60	0.19	ug/L		08/30/18 01:59	08/30/18 03:08	1
Antimony	0.31	U	1.0	0.31	ug/L		08/30/18 01:59	08/30/18 03:08	1
Selenium	0.35	U	5.0	0.35	ug/L		08/30/18 01:59	08/30/18 03:08	1
Vanadium	0.59	U	2.0	0.59	ug/L		08/30/18 01:59	08/30/18 03:08	1
Zinc	2.7	U	8.0	2.7	ug/L		08/30/18 01:59	08/30/18 03:08	1
Aluminum	7.5	U	20.0	7.5	ug/L		08/30/18 01:59	08/30/18 03:08	1
Sodium	37.9	U	100	37.9	ug/L		08/30/18 01:59	08/30/18 03:08	1
Magnesium	32.9	U	100	32.9	ug/L		08/30/18 01:59	08/30/18 03:08	1
Potassium	32.5	U	100	32.5	ug/L		08/30/18 01:59	08/30/18 03:08	1
Calcium	33.8	U	100	33.8	ug/L		08/30/18 01:59	08/30/18 03:08	1
Iron	22.9	U	60.0	22.9	ug/L		08/30/18 01:59	08/30/18 03:08	1
Thallium	0.12	U	0.40	0.12	ug/L		08/30/18 01:59	08/30/18 03:08	1

Lab Sample ID: MB 460-548327/1-B
Matrix: Water
Analysis Batch: 548676

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 548508

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.64	U	2.0	0.64	ug/L		08/30/18 01:59	08/30/18 13:09	1
Copper	0.95	U	2.0	0.95	ug/L		08/30/18 01:59	08/30/18 13:09	1
Nickel	0.65	U	2.0	0.65	ug/L		08/30/18 01:59	08/30/18 13:09	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163302-5 MS
Matrix: Water
Analysis Batch: 548548

Client Sample ID: CMS-50-082318
Prep Type: Dissolved
Prep Batch: 548508

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	10.0	8.89		ug/L		89	75 - 125
Arsenic	0.77	U	20.0	21.37		ug/L		107	75 - 125
Barium	47.5	F1	20.0	72.89	F1	ug/L		127	75 - 125
Beryllium	0.26	U	10.0	9.79		ug/L		98	75 - 125
Cadmium	0.61	U	10.0	8.62		ug/L		86	75 - 125
Chromium	1.3	U	20.0	17.57		ug/L		88	75 - 125
Manganese	671		100	829.7	4	ug/L		159	75 - 125
Lead	0.37	U	10.0	9.77		ug/L		98	75 - 125
Antimony	0.62	U F1	10.0	7.42	F1	ug/L		74	75 - 125
Selenium	0.69	U	20.0	21.88		ug/L		109	75 - 125
Vanadium	1.2	U	20.0	18.20		ug/L		91	75 - 125
Zinc	81.2		100	177.3		ug/L		96	75 - 125
Aluminum	15.0	U	1000	923.5		ug/L		92	75 - 125
Sodium	77800		1000	86540	4	ug/L		875	75 - 125
Magnesium	13300		1000	15400	4	ug/L		213	75 - 125
Potassium	2060		1000	3226		ug/L		117	75 - 125
Calcium	45200		1000	50210	4	ug/L		504	75 - 125
Iron	45.7	U	1000	910.4		ug/L		91	75 - 125
Thallium	0.24	U	8.00	7.52		ug/L		94	75 - 125

Lab Sample ID: 460-163302-5 MS
Matrix: Water
Analysis Batch: 548676

Client Sample ID: CMS-50-082318
Prep Type: Dissolved
Prep Batch: 548508

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	1.3	U	10.0	9.02		ug/L		90	75 - 125
Copper	1.9	U	20.0	16.74		ug/L		84	75 - 125
Nickel	1.3	U	20.0	18.63		ug/L		93	75 - 125

Lab Sample ID: 460-163302-5 DU
Matrix: Water
Analysis Batch: 548548

Client Sample ID: CMS-50-082318
Prep Type: Dissolved
Prep Batch: 548508

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	0.77	U	0.77	U	ug/L		NC	20
Barium	47.5	F1	50.10		ug/L		5	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Chromium	1.3	U	1.3	U	ug/L		NC	20
Manganese	671		703.9		ug/L		5	20
Lead	0.37	U	0.37	U	ug/L		NC	20
Antimony	0.62	U F1	0.62	U	ug/L		NC	20
Selenium	0.69	U	0.69	U	ug/L		NC	20
Vanadium	1.2	U	1.2	U	ug/L		NC	20
Zinc	81.2		81.61		ug/L		0.5	20
Aluminum	15.0	U	15.0	U	ug/L		NC	20
Sodium	77800		82190		ug/L		6	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163302-5 DU
Matrix: Water
Analysis Batch: 548548

Client Sample ID: CMS-50-082318
Prep Type: Dissolved
Prep Batch: 548508

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Magnesium	13300		14030		ug/L		5	20
Potassium	2060		2177		ug/L		6	20
Calcium	45200		47150		ug/L		4	20
Iron	45.7	U	45.7	U	ug/L		NC	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Lab Sample ID: 460-163302-5 DU
Matrix: Water
Analysis Batch: 548676

Client Sample ID: CMS-50-082318
Prep Type: Dissolved
Prep Batch: 548508

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cobalt	1.3	U	1.3	U	ug/L		NC	20
Copper	1.9	U	1.9	U	ug/L		NC	20
Nickel	1.3	U	1.3	U	ug/L		NC	20

Lab Sample ID: MB 460-548327/1-C
Matrix: Water
Analysis Batch: 548948

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 548641

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	37.9	U	100	37.9	ug/L		08/30/18 13:04	08/31/18 10:42	1
Potassium	32.5	U	100	32.5	ug/L		08/30/18 13:04	08/31/18 10:42	1

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 548948

Client Sample ID: PMS-230-082418
Prep Type: Dissolved
Prep Batch: 548641

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	29500		1000	29880	4	ug/L		39	75 - 125
Potassium	8030		1000	8852	4	ug/L		83	75 - 125

Lab Sample ID: 460-163302-21 DU
Matrix: Water
Analysis Batch: 548948

Client Sample ID: PMS-230-082418
Prep Type: Dissolved
Prep Batch: 548641

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sodium	29500		29980		ug/L		2	20
Potassium	8030		8134		ug/L		1	20

Lab Sample ID: MB 460-552065/1-B
Matrix: Water
Analysis Batch: 551988

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 552068

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.68	U	1.0	0.68	ug/L		09/14/18 01:10	09/14/18 01:34	1
Arsenic	0.38	U	1.0	0.38	ug/L		09/14/18 01:10	09/14/18 01:34	1
Barium	0.57	U	2.0	0.57	ug/L		09/14/18 01:10	09/14/18 01:34	1
Beryllium	0.13	U	0.40	0.13	ug/L		09/14/18 01:10	09/14/18 01:34	1
Cadmium	0.31	U	1.0	0.31	ug/L		09/14/18 01:10	09/14/18 01:34	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-552065/1-B
Matrix: Water
Analysis Batch: 551988

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 552068

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.64	U	2.0	0.64	ug/L		09/14/18 01:10	09/14/18 01:34	1
Chromium	0.66	U	2.0	0.66	ug/L		09/14/18 01:10	09/14/18 01:34	1
Copper	0.95	U	2.0	0.95	ug/L		09/14/18 01:10	09/14/18 01:34	1
Manganese	1.3	U	4.0	1.3	ug/L		09/14/18 01:10	09/14/18 01:34	1
Nickel	0.65	U	2.0	0.65	ug/L		09/14/18 01:10	09/14/18 01:34	1
Lead	0.19	U	0.60	0.19	ug/L		09/14/18 01:10	09/14/18 01:34	1
Antimony	0.31	U	1.0	0.31	ug/L		09/14/18 01:10	09/14/18 01:34	1
Selenium	0.35	U	5.0	0.35	ug/L		09/14/18 01:10	09/14/18 01:34	1
Vanadium	0.59	U	2.0	0.59	ug/L		09/14/18 01:10	09/14/18 01:34	1
Zinc	2.7	U	8.0	2.7	ug/L		09/14/18 01:10	09/14/18 01:34	1
Aluminum	7.5	U	20.0	7.5	ug/L		09/14/18 01:10	09/14/18 01:34	1
Magnesium	32.9	U	100	32.9	ug/L		09/14/18 01:10	09/14/18 01:34	1
Calcium	33.8	U	100	33.8	ug/L		09/14/18 01:10	09/14/18 01:34	1
Iron	22.9	U	60.0	22.9	ug/L		09/14/18 01:10	09/14/18 01:34	1
Thallium	0.12	U	0.40	0.12	ug/L		09/14/18 01:10	09/14/18 01:34	1

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 551988

Client Sample ID: PMS-230-082418
Prep Type: Dissolved
Prep Batch: 552068

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	10.0	10.64		ug/L		106	75 - 125
Arsenic	0.77	U	20.0	24.65		ug/L		123	75 - 125
Barium	126		20.0	146.9	4	ug/L		106	75 - 125
Beryllium	0.26	U	10.0	9.51		ug/L		95	75 - 125
Cadmium	0.61	U	10.0	10.24		ug/L		102	75 - 125
Cobalt	1.3	U	10.0	11.15		ug/L		112	75 - 125
Chromium	1.3	U	20.0	20.46		ug/L		102	75 - 125
Copper	1.9	U	20.0	20.09		ug/L		100	75 - 125
Manganese	1890		100	2034	4	ug/L		149	75 - 125
Nickel	2.6	J	20.0	22.71		ug/L		101	75 - 125
Lead	0.37	U	10.0	10.42		ug/L		104	75 - 125
Antimony	0.62	U	10.0	9.42		ug/L		94	75 - 125
Selenium	0.69	U F1	20.0	27.39	F1	ug/L		137	75 - 125
Vanadium	1.2	U	20.0	20.36		ug/L		102	75 - 125
Zinc	91.2		100	201.1		ug/L		110	75 - 125
Aluminum	15.0	U	1000	1079		ug/L		108	75 - 125
Magnesium	11900		1000	13420	4	ug/L		148	75 - 125
Calcium	91500		1000	95120	4	ug/L		361	75 - 125
Iron	5710		1000	6874	4	ug/L		117	75 - 125
Thallium	0.24	U	8.00	8.23		ug/L		103	75 - 125

Lab Sample ID: 460-163302-21 DU
Matrix: Water
Analysis Batch: 551988

Client Sample ID: PMS-230-082418
Prep Type: Dissolved
Prep Batch: 552068

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	0.77	U	0.77	U	ug/L		NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163302-21 DU
Matrix: Water
Analysis Batch: 551988

Client Sample ID: PMS-230-082418
Prep Type: Dissolved
Prep Batch: 552068

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Barium	126		122.7		ug/L		3	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	1.3	U	1.3	U	ug/L		NC	20
Chromium	1.3	U	1.3	U	ug/L		NC	20
Copper	1.9	U	1.9	U	ug/L		NC	20
Manganese	1890		1850		ug/L		2	20
Nickel	2.6	J	2.54	J	ug/L		1	20
Lead	0.37	U	0.37	U	ug/L		NC	20
Antimony	0.62	U	0.62	U	ug/L		NC	20
Selenium	0.69	U F1	0.69	U	ug/L		NC	20
Vanadium	1.2	U	1.2	U	ug/L		NC	20
Zinc	91.2		92.18		ug/L		1	20
Aluminum	15.0	U	15.0	U	ug/L		NC	20
Magnesium	11900		11810		ug/L		1	20
Calcium	91500		89620		ug/L		2	20
Iron	5710		5585		ug/L		2	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 460-548362/1-A
Matrix: Water
Analysis Batch: 548403

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548362

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:26	08/29/18 13:53	1

Lab Sample ID: LCS 460-548362/2-A
Matrix: Water
Analysis Batch: 548403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548362

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.977		ug/L		98	80 - 120

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 548403

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 548362

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	0.934		ug/L		93	75 - 125

Lab Sample ID: 460-163302-21 DU
Matrix: Water
Analysis Batch: 548403

Client Sample ID: PMS-230-082418
Prep Type: Total/NA
Prep Batch: 548362

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 460-548365/1-A
Matrix: Water
Analysis Batch: 548403

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548365

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:41	08/29/18 15:38	1

Lab Sample ID: LCS 460-548365/2-A
Matrix: Water
Analysis Batch: 548403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548365

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.967		ug/L		97	80 - 120

Lab Sample ID: 460-163302-5 MS
Matrix: Water
Analysis Batch: 548403

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 548365

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	0.984		ug/L		98	75 - 125

Lab Sample ID: 460-163302-5 DU
Matrix: Water
Analysis Batch: 548403

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 548365

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Lab Sample ID: LCS 460-548366/2-A
Matrix: Water
Analysis Batch: 548403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548366

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.969		ug/L		97	80 - 120

Lab Sample ID: LCS 460-548638/2-A
Matrix: Water
Analysis Batch: 548694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	1.01		ug/L		101	80 - 120

Lab Sample ID: MB 460-548361/1-B
Matrix: Water
Analysis Batch: 548403

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 548366

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/29/18 12:45	08/29/18 16:05	1

Lab Sample ID: 460-163302-21 MS
Matrix: Water
Analysis Batch: 548403

Client Sample ID: PMS-230-082418
Prep Type: Dissolved
Prep Batch: 548366

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	0.947		ug/L		95	75 - 125

Lab Sample ID: 460-163302-21 DU
Matrix: Water
Analysis Batch: 548403

Client Sample ID: PMS-230-082418
Prep Type: Dissolved
Prep Batch: 548366

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Lab Sample ID: MB 460-548634/1-B
Matrix: Water
Analysis Batch: 548694

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 548638

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/30/18 12:57	08/30/18 15:01	1

Lab Sample ID: 460-163302-5 MS
Matrix: Water
Analysis Batch: 548694

Client Sample ID: CMS-50-082318
Prep Type: Dissolved
Prep Batch: 548638

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	1.01		ug/L		101	75 - 125

Lab Sample ID: 460-163302-5 DU
Matrix: Water
Analysis Batch: 548694

Client Sample ID: CMS-50-082318
Prep Type: Dissolved
Prep Batch: 548638

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 460-548650/1-A
Matrix: Water
Analysis Batch: 548949

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548650

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/30/18 13:50	08/31/18 10:41	1

Lab Sample ID: LCS 460-548650/2-A
Matrix: Water
Analysis Batch: 548949

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548650

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.123	*	mg/L		123	85 - 115

Lab Sample ID: 460-163302-5 MS
Matrix: Water
Analysis Batch: 548949

Client Sample ID: CMS-50-082318
Prep Type: Total/NA
Prep Batch: 548650

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0020	U * F1	0.200	0.253	F1	mg/L		127	75 - 125

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: 460-163302-5 MSD — **Client Sample ID: CMS-50-082318**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548949 — **Prep Batch: 548650**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U * F1	0.200	0.249		mg/L		125	75 - 125	2	20

Lab Sample ID: 460-163302-11 MS — **Client Sample ID: OB-5-082318**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548949 — **Prep Batch: 548650**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0020	U * F1	0.200	0.277	F1	mg/L		139	75 - 125

Lab Sample ID: 460-163302-11 MSD — **Client Sample ID: OB-5-082318**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548949 — **Prep Batch: 548650**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U * F1	0.200	0.280	F1	mg/L		140	75 - 125	1	20

Lab Sample ID: MB 460-548890/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548949 — **Prep Batch: 548890**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:11	1

Lab Sample ID: LCS 460-548890/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548949 — **Prep Batch: 548890**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0995		mg/L		100	85 - 115

Lab Sample ID: 460-163302-21 MS — **Client Sample ID: PMS-230-082418**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548949 — **Prep Batch: 548890**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0020	U	0.200	0.232		mg/L		116	75 - 125

Lab Sample ID: 460-163302-21 MSD — **Client Sample ID: PMS-230-082418**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548949 — **Prep Batch: 548890**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U	0.200	0.230		mg/L		115	75 - 125	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 460-547667/2
Matrix: Water
Analysis Batch: 547667

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/26/18 07:45	1
Alkalinity	5.0	U	5.0	5.0	mg/L			08/26/18 07:45	1

Lab Sample ID: MB 460-547667/25
Matrix: Water
Analysis Batch: 547667

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/26/18 11:18	1
Alkalinity	5.0	U	5.0	5.0	mg/L			08/26/18 11:18	1

Lab Sample ID: LCSSRM 460-547667/26
Matrix: Water
Analysis Batch: 547667

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	384	363.6		mg/L		94.7	84.9 - 114.8

Lab Sample ID: LCSSRM 460-547667/3
Matrix: Water
Analysis Batch: 547667

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	384	364.8		mg/L		95.0	84.9 - 114.8

Lab Sample ID: 460-163302-5 DU
Matrix: Water
Analysis Batch: 547667

Client Sample ID: CMS-50-082318
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	146		146.0		mg/L		0.08	10
Alkalinity	146		146.0		mg/L		0.08	10

Lab Sample ID: 460-163302-21 DU
Matrix: Water
Analysis Batch: 547667

Client Sample ID: PMS-230-082418
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	565		555.7		mg/L		2	10
Alkalinity	565		555.7		mg/L		2	10

GC/MS VOA

Analysis Batch: 548123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-6	OB-30C-082318	Total/NA	Water	8260C	
460-163302-10	SC-02-082318	Total/NA	Water	8260C	
460-163302-11	OB-5-082318	Total/NA	Water	8260C	
460-163302-12	Dup-02-082318	Total/NA	Water	8260C	
460-163302-13	OB-12-082318	Total/NA	Water	8260C	
460-163302-14	OB-2-082318	Total/NA	Water	8260C	
460-163302-15	TB-03-082418	Total/NA	Water	8260C	
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	8260C	
460-163302-17	OB-30A-082418	Total/NA	Water	8260C	
460-163302-18	Dup-03-082418	Total/NA	Water	8260C	
MB 460-548123/8	Method Blank	Total/NA	Water	8260C	
LCS 460-548123/4	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 548231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-2	OB-20A-082318	Total/NA	Water	8260C	
460-163302-19	PMS-50-082418	Total/NA	Water	8260C	
460-163302-20	PMS-180-082418	Total/NA	Water	8260C	
460-163302-21	PMS-230-082418	Total/NA	Water	8260C	
460-163302-23	FB-03-082418	Total/NA	Water	8260C	
460-163302-24	RW-5-082418	Total/NA	Water	8260C	
MB 460-548231/8	Method Blank	Total/NA	Water	8260C	
LCS 460-548231/4	Lab Control Sample	Total/NA	Water	8260C	
460-163302-21 MS	PMS-230-082418	Total/NA	Water	8260C	
460-163302-21 MSD	PMS-230-082418	Total/NA	Water	8260C	

Analysis Batch: 548540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-2	OB-20A-082318	Total/NA	Water	8260C SIM	
460-163302-6	OB-30C-082318	Total/NA	Water	8260C SIM	
460-163302-10	SC-02-082318	Total/NA	Water	8260C SIM	
460-163302-11	OB-5-082318	Total/NA	Water	8260C SIM	
460-163302-12	Dup-02-082318	Total/NA	Water	8260C SIM	
460-163302-13	OB-12-082318	Total/NA	Water	8260C SIM	
460-163302-14	OB-2-082318	Total/NA	Water	8260C SIM	
460-163302-15	TB-03-082418	Total/NA	Water	8260C SIM	
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	8260C SIM	
460-163302-17	OB-30A-082418	Total/NA	Water	8260C SIM	
MB 460-548540/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-548540/3	Lab Control Sample	Total/NA	Water	8260C SIM	

Analysis Batch: 548858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-18	Dup-03-082418	Total/NA	Water	8260C SIM	
460-163302-19	PMS-50-082418	Total/NA	Water	8260C SIM	
460-163302-20	PMS-180-082418	Total/NA	Water	8260C SIM	
460-163302-21	PMS-230-082418	Total/NA	Water	8260C SIM	
460-163302-23	FB-03-082418	Total/NA	Water	8260C SIM	
460-163302-24	RW-5-082418	Total/NA	Water	8260C SIM	
MB 460-548858/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-548858/4	Lab Control Sample	Total/NA	Water	8260C SIM	

GC/MS VOA (Continued)

Analysis Batch: 548858 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 460-548858/22	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
460-163302-21 MS	PMS-230-082418	Total/NA	Water	8260C SIM	
460-163302-21 MSD	PMS-230-082418	Total/NA	Water	8260C SIM	

GC/MS Semi VOA

Prep Batch: 547574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	3510C	
460-163302-2	OB-20A-082318	Total/NA	Water	3510C	
460-163302-3	RW-6-082318	Total/NA	Water	3510C	
460-163302-4	RW-6A-082318	Total/NA	Water	3510C	
460-163302-5	CMS-50-082318	Total/NA	Water	3510C	
460-163302-6	OB-30C-082318	Total/NA	Water	3510C	
460-163302-7	CMS-100-082318	Total/NA	Water	3510C	
460-163302-8	CMS-160-082318	Total/NA	Water	3510C	
460-163302-9	CMS-275-082318	Total/NA	Water	3510C	
460-163302-10	SC-02-082318	Total/NA	Water	3510C	
MB 460-547574/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-547574/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-547574/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-547574/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-547574/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-163302-5 MS	CMS-50-082318	Total/NA	Water	3510C	
460-163302-5 MSD	CMS-50-082318	Total/NA	Water	3510C	

Prep Batch: 547599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-11	OB-5-082318	Total/NA	Water	3510C	
460-163302-12	Dup-02-082318	Total/NA	Water	3510C	
460-163302-13	OB-12-082318	Total/NA	Water	3510C	
460-163302-14	OB-2-082318	Total/NA	Water	3510C	
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	3510C	
460-163302-17	OB-30A-082418	Total/NA	Water	3510C	
460-163302-18	Dup-03-082418	Total/NA	Water	3510C	
460-163302-19	PMS-50-082418	Total/NA	Water	3510C	
460-163302-20	PMS-180-082418	Total/NA	Water	3510C	
460-163302-22	SC-01-082418	Total/NA	Water	3510C	
460-163302-23	FB-03-082418	Total/NA	Water	3510C	
MB 460-547599/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-547599/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-547599/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-547599/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-547599/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-163112-E-9-B MS	Matrix Spike	Total/NA	Water	3510C	
460-163112-E-9-C MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 547615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	8270D	547574

GC/MS Semi VOA (Continued)

Analysis Batch: 547615 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-2	OB-20A-082318	Total/NA	Water	8270D	547574
460-163302-3	RW-6-082318	Total/NA	Water	8270D	547574
460-163302-4	RW-6A-082318	Total/NA	Water	8270D	547574
460-163302-5	CMS-50-082318	Total/NA	Water	8270D	547574
460-163302-6	OB-30C-082318	Total/NA	Water	8270D	547574
460-163302-7	CMS-100-082318	Total/NA	Water	8270D	547574
460-163302-8	CMS-160-082318	Total/NA	Water	8270D	547574
460-163302-9	CMS-275-082318	Total/NA	Water	8270D	547574
460-163302-10	SC-02-082318	Total/NA	Water	8270D	547574
MB 460-547574/1-A	Method Blank	Total/NA	Water	8270D	547574
LCS 460-547574/2-A	Lab Control Sample	Total/NA	Water	8270D	547574
LCS 460-547574/3-A	Lab Control Sample	Total/NA	Water	8270D	547574
460-163302-5 MS	CMS-50-082318	Total/NA	Water	8270D	547574
460-163302-5 MSD	CMS-50-082318	Total/NA	Water	8270D	547574

Analysis Batch: 547625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-11	OB-5-082318	Total/NA	Water	8270D	547599
460-163302-12	Dup-02-082318	Total/NA	Water	8270D	547599
460-163302-13	OB-12-082318	Total/NA	Water	8270D	547599
460-163302-14	OB-2-082318	Total/NA	Water	8270D	547599
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	8270D	547599
460-163302-17	OB-30A-082418	Total/NA	Water	8270D	547599
460-163302-18	Dup-03-082418	Total/NA	Water	8270D	547599
460-163302-19	PMS-50-082418	Total/NA	Water	8270D	547599
460-163302-20	PMS-180-082418	Total/NA	Water	8270D	547599
460-163302-22	SC-01-082418	Total/NA	Water	8270D	547599
460-163302-23	FB-03-082418	Total/NA	Water	8270D	547599
MB 460-547599/1-A	Method Blank	Total/NA	Water	8270D	547599
LCS 460-547599/2-A	Lab Control Sample	Total/NA	Water	8270D	547599
LCS 460-547599/3-A	Lab Control Sample	Total/NA	Water	8270D	547599
460-163112-E-9-B MS	Matrix Spike	Total/NA	Water	8270D	547599
460-163112-E-9-C MSD	Matrix Spike Duplicate	Total/NA	Water	8270D	547599

Prep Batch: 547674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	3510C	
460-163302-2	OB-20A-082318	Total/NA	Water	3510C	
460-163302-3	RW-6-082318	Total/NA	Water	3510C	
460-163302-4	RW-6A-082318	Total/NA	Water	3510C	
460-163302-5	CMS-50-082318	Total/NA	Water	3510C	
460-163302-6	OB-30C-082318	Total/NA	Water	3510C	
460-163302-7	CMS-100-082318	Total/NA	Water	3510C	
460-163302-8	CMS-160-082318	Total/NA	Water	3510C	
460-163302-9	CMS-275-082318	Total/NA	Water	3510C	
460-163302-10	SC-02-082318	Total/NA	Water	3510C	
460-163302-11	OB-5-082318	Total/NA	Water	3510C	
460-163302-12	Dup-02-082318	Total/NA	Water	3510C	
460-163302-13	OB-12-082318	Total/NA	Water	3510C	
460-163302-14	OB-2-082318	Total/NA	Water	3510C	
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 547674 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-17	OB-30A-082418	Total/NA	Water	3510C	
460-163302-18	Dup-03-082418	Total/NA	Water	3510C	
460-163302-19	PMS-50-082418	Total/NA	Water	3510C	
460-163302-20	PMS-180-082418	Total/NA	Water	3510C	
460-163302-22	SC-01-082418	Total/NA	Water	3510C	
MB 460-547674/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-547674/2-A	Lab Control Sample	Total/NA	Water	3510C	
460-163302-5 MS	CMS-50-082318	Total/NA	Water	3510C	
460-163302-5 MSD	CMS-50-082318	Total/NA	Water	3510C	

Prep Batch: 547677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21	PMS-230-082418	Total/NA	Water	3510C	
460-163302-23	FB-03-082418	Total/NA	Water	3510C	
460-163302-24	RW-5-082418	Total/NA	Water	3510C	
MB 460-547677/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-547677/2-A	Lab Control Sample	Total/NA	Water	3510C	
460-163302-21 MS	PMS-230-082418	Total/NA	Water	3510C	
460-163302-21 MSD	PMS-230-082418	Total/NA	Water	3510C	
460-163313-A-2-A MS	Matrix Spike	Total/NA	Water	3510C	
460-163313-B-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 547693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	8270D SIM	547574
460-163302-2	OB-20A-082318	Total/NA	Water	8270D SIM	547574
460-163302-3	RW-6-082318	Total/NA	Water	8270D SIM	547574
460-163302-4	RW-6A-082318	Total/NA	Water	8270D SIM	547574
460-163302-5	CMS-50-082318	Total/NA	Water	8270D SIM	547574
460-163302-6	OB-30C-082318	Total/NA	Water	8270D SIM	547574
460-163302-7	CMS-100-082318	Total/NA	Water	8270D SIM	547574
460-163302-8	CMS-160-082318	Total/NA	Water	8270D SIM	547574
460-163302-9	CMS-275-082318	Total/NA	Water	8270D SIM	547574
460-163302-10	SC-02-082318	Total/NA	Water	8270D SIM	547574

Analysis Batch: 547710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-11	OB-5-082318	Total/NA	Water	8270D SIM	547599
460-163302-12	Dup-02-082318	Total/NA	Water	8270D SIM	547599
460-163302-13	OB-12-082318	Total/NA	Water	8270D SIM	547599
460-163302-14	OB-2-082318	Total/NA	Water	8270D SIM	547599
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	8270D SIM	547599
460-163302-17	OB-30A-082418	Total/NA	Water	8270D SIM	547599
460-163302-18	Dup-03-082418	Total/NA	Water	8270D SIM	547599
460-163302-19	PMS-50-082418	Total/NA	Water	8270D SIM	547599
460-163302-20	PMS-180-082418	Total/NA	Water	8270D SIM	547599
460-163302-22	SC-01-082418	Total/NA	Water	8270D SIM	547599
460-163302-23	FB-03-082418	Total/NA	Water	8270D SIM	547599
MB 460-547599/1-A	Method Blank	Total/NA	Water	8270D SIM	547599
LCSD 460-547599/5-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	547599

GC/MS Semi VOA (Continued)

Analysis Batch: 547927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-2	OB-20A-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-3	RW-6-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-4	RW-6A-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-5	CMS-50-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-6	OB-30C-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-7	CMS-100-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-8	CMS-160-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-9	CMS-275-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-10	SC-02-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-11	OB-5-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-12	Dup-02-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-13	OB-12-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-14	OB-2-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	8270D SIM ID	547674
460-163302-17	OB-30A-082418	Total/NA	Water	8270D SIM ID	547674
460-163302-18	Dup-03-082418	Total/NA	Water	8270D SIM ID	547674
460-163302-19	PMS-50-082418	Total/NA	Water	8270D SIM ID	547674
460-163302-20	PMS-180-082418	Total/NA	Water	8270D SIM ID	547674
460-163302-22	SC-01-082418	Total/NA	Water	8270D SIM ID	547674
MB 460-547674/1-A	Method Blank	Total/NA	Water	8270D SIM ID	547674
LCS 460-547674/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	547674
460-163302-5 MS	CMS-50-082318	Total/NA	Water	8270D SIM ID	547674
460-163302-5 MSD	CMS-50-082318	Total/NA	Water	8270D SIM ID	547674

Analysis Batch: 547929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-547574/1-A	Method Blank	Total/NA	Water	8270D SIM	547574
LCS 460-547574/4-A	Lab Control Sample	Total/NA	Water	8270D SIM	547574
LCS 460-547599/4-A	Lab Control Sample	Total/NA	Water	8270D SIM	547599
LCSD 460-547574/5-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	547574

Analysis Batch: 547993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-23	FB-03-082418	Total/NA	Water	8270D SIM ID	547677
460-163302-24	RW-5-082418	Total/NA	Water	8270D SIM ID	547677
MB 460-547677/1-A	Method Blank	Total/NA	Water	8270D SIM ID	547677
LCS 460-547677/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	547677
460-163313-A-2-A MS	Matrix Spike	Total/NA	Water	8270D SIM ID	547677
460-163313-B-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	8270D SIM ID	547677

Prep Batch: 548149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21	PMS-230-082418	Total/NA	Water	3510C	
460-163302-24	RW-5-082418	Total/NA	Water	3510C	
MB 460-548149/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-548149/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-548149/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-548149/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-548149/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-163302-21 MS	PMS-230-082418	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 548149 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21 MSD	PMS-230-082418	Total/NA	Water	3510C	

Analysis Batch: 548257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21	PMS-230-082418	Total/NA	Water	8270D	548149
460-163302-24	RW-5-082418	Total/NA	Water	8270D	548149
MB 460-548149/1-A	Method Blank	Total/NA	Water	8270D	548149
LCS 460-548149/2-A	Lab Control Sample	Total/NA	Water	8270D	548149
LCS 460-548149/3-A	Lab Control Sample	Total/NA	Water	8270D	548149
460-163302-21 MS	PMS-230-082418	Total/NA	Water	8270D	548149
460-163302-21 MSD	PMS-230-082418	Total/NA	Water	8270D	548149

Analysis Batch: 548270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21	PMS-230-082418	Total/NA	Water	8270D SIM	548149
460-163302-24	RW-5-082418	Total/NA	Water	8270D SIM	548149
MB 460-548149/1-A	Method Blank	Total/NA	Water	8270D SIM	548149
LCS 460-548149/4-A	Lab Control Sample	Total/NA	Water	8270D SIM	548149
LCSD 460-548149/5-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	548149

Analysis Batch: 548328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21	PMS-230-082418	Total/NA	Water	8270D SIM ID	547677
460-163302-21 MS	PMS-230-082418	Total/NA	Water	8270D SIM ID	547677
460-163302-21 MSD	PMS-230-082418	Total/NA	Water	8270D SIM ID	547677

GC Semi VOA

Prep Batch: 547718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	3510C	
460-163302-2	OB-20A-082318	Total/NA	Water	3510C	
460-163302-3	RW-6-082318	Total/NA	Water	3510C	
460-163302-4	RW-6A-082318	Total/NA	Water	3510C	
460-163302-5	CMS-50-082318	Total/NA	Water	3510C	
460-163302-6	OB-30C-082318	Total/NA	Water	3510C	
460-163302-7	CMS-100-082318	Total/NA	Water	3510C	
MB 460-547718/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-547718/2-A	Lab Control Sample	Total/NA	Water	3510C	
460-163302-5 MS	CMS-50-082318	Total/NA	Water	3510C	
460-163302-5 MSD	CMS-50-082318	Total/NA	Water	3510C	

Prep Batch: 548017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-8	CMS-160-082318	Total/NA	Water	3510C	
460-163302-9	CMS-275-082318	Total/NA	Water	3510C	
460-163302-10	SC-02-082318	Total/NA	Water	3510C	
460-163302-11	OB-5-082318	Total/NA	Water	3510C	
460-163302-12	Dup-02-082318	Total/NA	Water	3510C	
460-163302-13	OB-12-082318	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Prep Batch: 548017 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-14	OB-2-082318	Total/NA	Water	3510C	
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	3510C	
460-163302-17	OB-30A-082418	Total/NA	Water	3510C	
460-163302-18	Dup-03-082418	Total/NA	Water	3510C	
460-163302-19	PMS-50-082418	Total/NA	Water	3510C	
460-163302-20	PMS-180-082418	Total/NA	Water	3510C	
460-163302-22	SC-01-082418	Total/NA	Water	3510C	
460-163302-23	FB-03-082418	Total/NA	Water	3510C	
MB 460-548017/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-548017/2-A	Lab Control Sample	Total/NA	Water	3510C	
460-163352-M-6-A MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	
460-163352-O-6-B MS	Matrix Spike	Total/NA	Water	3510C	

Analysis Batch: 548111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	8082A	547718
460-163302-2	OB-20A-082318	Total/NA	Water	8082A	547718
460-163302-5	CMS-50-082318	Total/NA	Water	8082A	547718
460-163302-6	OB-30C-082318	Total/NA	Water	8082A	547718
460-163302-7	CMS-100-082318	Total/NA	Water	8082A	547718
MB 460-547718/1-A	Method Blank	Total/NA	Water	8082A	547718
LCS 460-547718/2-A	Lab Control Sample	Total/NA	Water	8082A	547718
460-163302-5 MS	CMS-50-082318	Total/NA	Water	8082A	547718
460-163302-5 MSD	CMS-50-082318	Total/NA	Water	8082A	547718

Analysis Batch: 548245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-3	RW-6-082318	Total/NA	Water	8082A	547718
460-163302-4	RW-6A-082318	Total/NA	Water	8082A	547718

Prep Batch: 548315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21	PMS-230-082418	Total/NA	Water	3510C	
460-163302-24	RW-5-082418	Total/NA	Water	3510C	
MB 460-548315/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-548315/2-A	Lab Control Sample	Total/NA	Water	3510C	
460-163302-21 MS	PMS-230-082418	Total/NA	Water	3510C	
460-163302-21 MSD	PMS-230-082418	Total/NA	Water	3510C	

Analysis Batch: 548386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-10	SC-02-082318	Total/NA	Water	8082A	548017
460-163302-12	Dup-02-082318	Total/NA	Water	8082A	548017
460-163302-13	OB-12-082318	Total/NA	Water	8082A	548017
460-163302-14	OB-2-082318	Total/NA	Water	8082A	548017
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	8082A	548017
460-163302-17	OB-30A-082418	Total/NA	Water	8082A	548017
460-163302-18	Dup-03-082418	Total/NA	Water	8082A	548017
460-163302-19	PMS-50-082418	Total/NA	Water	8082A	548017
460-163302-20	PMS-180-082418	Total/NA	Water	8082A	548017
460-163302-22	SC-01-082418	Total/NA	Water	8082A	548017

GC Semi VOA (Continued)

Analysis Batch: 548386 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-23	FB-03-082418	Total/NA	Water	8082A	548017
MB 460-548017/1-A	Method Blank	Total/NA	Water	8082A	548017
LCS 460-548017/2-A	Lab Control Sample	Total/NA	Water	8082A	548017
460-163352-M-6-A MSD	Matrix Spike Duplicate	Total/NA	Water	8082A	548017
460-163352-O-6-B MS	Matrix Spike	Total/NA	Water	8082A	548017

Analysis Batch: 548447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-24	RW-5-082418	Total/NA	Water	8082A	548315

Analysis Batch: 548465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-8	CMS-160-082318	Total/NA	Water	8082A	548017
460-163302-9	CMS-275-082318	Total/NA	Water	8082A	548017
460-163302-11	OB-5-082318	Total/NA	Water	8082A	548017

Analysis Batch: 548752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21	PMS-230-082418	Total/NA	Water	8082A	548315
MB 460-548315/1-A	Method Blank	Total/NA	Water	8082A	548315
LCS 460-548315/2-A	Lab Control Sample	Total/NA	Water	8082A	548315
460-163302-21 MS	PMS-230-082418	Total/NA	Water	8082A	548315
460-163302-21 MSD	PMS-230-082418	Total/NA	Water	8082A	548315

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Analysis Batch: 547563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	9056A	
460-163302-2	OB-20A-082318	Total/NA	Water	9056A	
460-163302-3	RW-6-082318	Total/NA	Water	9056A	
460-163302-4	RW-6A-082318	Total/NA	Water	9056A	
460-163302-5	CMS-50-082318	Total/NA	Water	9056A	
460-163302-6	OB-30C-082318	Total/NA	Water	9056A	
460-163302-7	CMS-100-082318	Total/NA	Water	9056A	
460-163302-8	CMS-160-082318	Total/NA	Water	9056A	
460-163302-9	CMS-275-082318	Total/NA	Water	9056A	
460-163302-10	SC-02-082318	Total/NA	Water	9056A	
460-163302-11	OB-5-082318	Total/NA	Water	9056A	
460-163302-12	Dup-02-082318	Total/NA	Water	9056A	
460-163302-13	OB-12-082318	Total/NA	Water	9056A	
460-163302-14	OB-2-082318	Total/NA	Water	9056A	
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	9056A	
460-163302-17	OB-30A-082418	Total/NA	Water	9056A	
460-163302-18	Dup-03-082418	Total/NA	Water	9056A	
460-163302-19	PMS-50-082418	Total/NA	Water	9056A	
460-163302-20	PMS-180-082418	Total/NA	Water	9056A	
460-163302-22	SC-01-082418	Total/NA	Water	9056A	
MB 460-547563/3	Method Blank	Total/NA	Water	9056A	
LCS 460-547563/5	Lab Control Sample	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 547563 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 460-547563/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163302-5 MS	CMS-50-082318	Total/NA	Water	9056A	
460-163302-5 MSD	CMS-50-082318	Total/NA	Water	9056A	
460-163302-22 MS	SC-01-082418	Total/NA	Water	9056A	
460-163302-22 MSD	SC-01-082418	Total/NA	Water	9056A	
460-163302-5 DU	CMS-50-082318	Total/NA	Water	9056A	
460-163302-22 DU	SC-01-082418	Total/NA	Water	9056A	

Analysis Batch: 547565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21	PMS-230-082418	Total/NA	Water	9056A	
460-163302-23	FB-03-082418	Total/NA	Water	9056A	
460-163302-24	RW-5-082418	Total/NA	Water	9056A	
MB 460-547565/3	Method Blank	Total/NA	Water	9056A	
LCS 460-547565/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-547565/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163302-21 MS	PMS-230-082418	Total/NA	Water	9056A	
460-163302-21 MSD	PMS-230-082418	Total/NA	Water	9056A	
460-163302-21 DU	PMS-230-082418	Total/NA	Water	9056A	

Analysis Batch: 547726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21 - DL	PMS-230-082418	Total/NA	Water	9056A	
MB 460-547726/3	Method Blank	Total/NA	Water	9056A	
LCS 460-547726/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-547726/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163302-21 MS - DL	PMS-230-082418	Total/NA	Water	9056A	
460-163302-21 MSD - DL	PMS-230-082418	Total/NA	Water	9056A	
460-163302-21 DU - DL	PMS-230-082418	Total/NA	Water	9056A	

Analysis Batch: 547825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-3 - DL	RW-6-082318	Total/NA	Water	9056A	
460-163302-5 - DL	CMS-50-082318	Total/NA	Water	9056A	
460-163302-6 - DL	OB-30C-082318	Total/NA	Water	9056A	
460-163302-7 - DL	CMS-100-082318	Total/NA	Water	9056A	
460-163302-8 - DL	CMS-160-082318	Total/NA	Water	9056A	
460-163302-9 - DL	CMS-275-082318	Total/NA	Water	9056A	
460-163302-10 - DL	SC-02-082318	Total/NA	Water	9056A	
460-163302-11 - DL	OB-5-082318	Total/NA	Water	9056A	
460-163302-16 - DL	RW-13 (71-91)-082418	Total/NA	Water	9056A	
460-163302-17 - DL	OB-30A-082418	Total/NA	Water	9056A	
460-163302-18 - DL	Dup-03-082418	Total/NA	Water	9056A	
MB 460-547825/3	Method Blank	Total/NA	Water	9056A	
LCS 460-547825/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-547825/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163302-5 MS - DL	CMS-50-082318	Total/NA	Water	9056A	
460-163302-5 MSD - DL	CMS-50-082318	Total/NA	Water	9056A	
460-163302-5 DU - DL	CMS-50-082318	Total/NA	Water	9056A	

Metals

Filtration Batch: 548327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Dissolved	Water	FILTRATION	
460-163302-2	OB-20A-082318	Dissolved	Water	FILTRATION	
460-163302-3	RW-6-082318	Dissolved	Water	FILTRATION	
460-163302-4	RW-6A-082318	Dissolved	Water	FILTRATION	
460-163302-5	CMS-50-082318	Dissolved	Water	FILTRATION	
460-163302-6	OB-30C-082318	Dissolved	Water	FILTRATION	
460-163302-7	CMS-100-082318	Dissolved	Water	FILTRATION	
460-163302-8	CMS-160-082318	Dissolved	Water	FILTRATION	
460-163302-9	CMS-275-082318	Dissolved	Water	FILTRATION	
460-163302-10	SC-02-082318	Dissolved	Water	FILTRATION	
460-163302-11	OB-5-082318	Dissolved	Water	FILTRATION	
460-163302-12	Dup-02-082318	Dissolved	Water	FILTRATION	
460-163302-13	OB-12-082318	Dissolved	Water	FILTRATION	
460-163302-14	OB-2-082318	Dissolved	Water	FILTRATION	
460-163302-16	RW-13 (71-91)-082418	Dissolved	Water	FILTRATION	
460-163302-17	OB-30A-082418	Dissolved	Water	FILTRATION	
460-163302-18	Dup-03-082418	Dissolved	Water	FILTRATION	
460-163302-19	PMS-50-082418	Dissolved	Water	FILTRATION	
460-163302-20	PMS-180-082418	Dissolved	Water	FILTRATION	
460-163302-21	PMS-230-082418	Dissolved	Water	FILTRATION	
460-163302-22	SC-01-082418	Dissolved	Water	FILTRATION	
460-163302-23	FB-03-082418	Dissolved	Water	FILTRATION	
460-163302-24	RW-5-082418	Dissolved	Water	FILTRATION	
MB 460-548327/1-B	Method Blank	Dissolved	Water	FILTRATION	
MB 460-548327/1-C	Method Blank	Dissolved	Water	FILTRATION	
460-163302-5 MS	CMS-50-082318	Dissolved	Water	FILTRATION	
460-163302-21 MS	PMS-230-082418	Dissolved	Water	FILTRATION	
460-163302-5 DU	CMS-50-082318	Dissolved	Water	FILTRATION	
460-163302-21 DU	PMS-230-082418	Dissolved	Water	FILTRATION	

Filtration Batch: 548361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Dissolved	Water	FILTRATION	
460-163302-2	OB-20A-082318	Dissolved	Water	FILTRATION	
460-163302-3	RW-6-082318	Dissolved	Water	FILTRATION	
460-163302-4	RW-6A-082318	Dissolved	Water	FILTRATION	
460-163302-6	OB-30C-082318	Dissolved	Water	FILTRATION	
460-163302-11	OB-5-082318	Dissolved	Water	FILTRATION	
460-163302-12	Dup-02-082318	Dissolved	Water	FILTRATION	
460-163302-13	OB-12-082318	Dissolved	Water	FILTRATION	
460-163302-14	OB-2-082318	Dissolved	Water	FILTRATION	
460-163302-16	RW-13 (71-91)-082418	Dissolved	Water	FILTRATION	
460-163302-17	OB-30A-082418	Dissolved	Water	FILTRATION	
460-163302-18	Dup-03-082418	Dissolved	Water	FILTRATION	
460-163302-19	PMS-50-082418	Dissolved	Water	FILTRATION	
460-163302-20	PMS-180-082418	Dissolved	Water	FILTRATION	
460-163302-21	PMS-230-082418	Dissolved	Water	FILTRATION	
460-163302-22	SC-01-082418	Dissolved	Water	FILTRATION	
460-163302-23	FB-03-082418	Dissolved	Water	FILTRATION	
460-163302-24	RW-5-082418	Dissolved	Water	FILTRATION	
MB 460-548361/1-B	Method Blank	Dissolved	Water	FILTRATION	

Metals (Continued)

Filtration Batch: 548361 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21 MS	PMS-230-082418	Dissolved	Water	FILTRATION	
460-163302-21 DU	PMS-230-082418	Dissolved	Water	FILTRATION	

Prep Batch: 548362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	7470A	
460-163302-2	OB-20A-082318	Total/NA	Water	7470A	
460-163302-11	OB-5-082318	Total/NA	Water	7470A	
460-163302-12	Dup-02-082318	Total/NA	Water	7470A	
460-163302-13	OB-12-082318	Total/NA	Water	7470A	
460-163302-14	OB-2-082318	Total/NA	Water	7470A	
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	7470A	
460-163302-17	OB-30A-082418	Total/NA	Water	7470A	
460-163302-18	Dup-03-082418	Total/NA	Water	7470A	
460-163302-19	PMS-50-082418	Total/NA	Water	7470A	
460-163302-20	PMS-180-082418	Total/NA	Water	7470A	
460-163302-21	PMS-230-082418	Total/NA	Water	7470A	
460-163302-22	SC-01-082418	Total/NA	Water	7470A	
460-163302-23	FB-03-082418	Total/NA	Water	7470A	
MB 460-548362/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-548362/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163302-21 MS	PMS-230-082418	Total/NA	Water	7470A	
460-163302-21 DU	PMS-230-082418	Total/NA	Water	7470A	

Prep Batch: 548365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-3	RW-6-082318	Total/NA	Water	7470A	
460-163302-4	RW-6A-082318	Total/NA	Water	7470A	
460-163302-5	CMS-50-082318	Total/NA	Water	7470A	
460-163302-6	OB-30C-082318	Total/NA	Water	7470A	
460-163302-7	CMS-100-082318	Total/NA	Water	7470A	
460-163302-8	CMS-160-082318	Total/NA	Water	7470A	
460-163302-9	CMS-275-082318	Total/NA	Water	7470A	
460-163302-10	SC-02-082318	Total/NA	Water	7470A	
460-163302-24	RW-5-082418	Total/NA	Water	7470A	
MB 460-548365/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-548365/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163302-5 MS	CMS-50-082318	Total/NA	Water	7470A	
460-163302-5 DU	CMS-50-082318	Total/NA	Water	7470A	

Prep Batch: 548366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Dissolved	Water	7470A	548361
460-163302-2	OB-20A-082318	Dissolved	Water	7470A	548361
460-163302-3	RW-6-082318	Dissolved	Water	7470A	548361
460-163302-4	RW-6A-082318	Dissolved	Water	7470A	548361
460-163302-6	OB-30C-082318	Dissolved	Water	7470A	548361
460-163302-11	OB-5-082318	Dissolved	Water	7470A	548361
460-163302-12	Dup-02-082318	Dissolved	Water	7470A	548361
460-163302-13	OB-12-082318	Dissolved	Water	7470A	548361
460-163302-14	OB-2-082318	Dissolved	Water	7470A	548361

Metals (Continued)

Prep Batch: 548366 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-16	RW-13 (71-91)-082418	Dissolved	Water	7470A	548361
460-163302-17	OB-30A-082418	Dissolved	Water	7470A	548361
460-163302-18	Dup-03-082418	Dissolved	Water	7470A	548361
460-163302-19	PMS-50-082418	Dissolved	Water	7470A	548361
460-163302-20	PMS-180-082418	Dissolved	Water	7470A	548361
460-163302-21	PMS-230-082418	Dissolved	Water	7470A	548361
460-163302-22	SC-01-082418	Dissolved	Water	7470A	548361
460-163302-23	FB-03-082418	Dissolved	Water	7470A	548361
460-163302-24	RW-5-082418	Dissolved	Water	7470A	548361
MB 460-548361/1-B	Method Blank	Dissolved	Water	7470A	548361
LCS 460-548366/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163302-21 MS	PMS-230-082418	Dissolved	Water	7470A	548361
460-163302-21 DU	PMS-230-082418	Dissolved	Water	7470A	548361

Analysis Batch: 548403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Dissolved	Water	7470A	548366
460-163302-1	OB-20B-082318	Total/NA	Water	7470A	548362
460-163302-2	OB-20A-082318	Dissolved	Water	7470A	548366
460-163302-2	OB-20A-082318	Total/NA	Water	7470A	548362
460-163302-3	RW-6-082318	Dissolved	Water	7470A	548366
460-163302-3	RW-6-082318	Total/NA	Water	7470A	548365
460-163302-4	RW-6A-082318	Dissolved	Water	7470A	548366
460-163302-4	RW-6A-082318	Total/NA	Water	7470A	548365
460-163302-5	CMS-50-082318	Total/NA	Water	7470A	548365
460-163302-6	OB-30C-082318	Dissolved	Water	7470A	548366
460-163302-6	OB-30C-082318	Total/NA	Water	7470A	548365
460-163302-7	CMS-100-082318	Total/NA	Water	7470A	548365
460-163302-8	CMS-160-082318	Total/NA	Water	7470A	548365
460-163302-9	CMS-275-082318	Total/NA	Water	7470A	548365
460-163302-10	SC-02-082318	Total/NA	Water	7470A	548365
460-163302-11	OB-5-082318	Dissolved	Water	7470A	548366
460-163302-11	OB-5-082318	Total/NA	Water	7470A	548362
460-163302-12	Dup-02-082318	Dissolved	Water	7470A	548366
460-163302-12	Dup-02-082318	Total/NA	Water	7470A	548362
460-163302-13	OB-12-082318	Dissolved	Water	7470A	548366
460-163302-13	OB-12-082318	Total/NA	Water	7470A	548362
460-163302-14	OB-2-082318	Dissolved	Water	7470A	548366
460-163302-14	OB-2-082318	Total/NA	Water	7470A	548362
460-163302-16	RW-13 (71-91)-082418	Dissolved	Water	7470A	548366
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	7470A	548362
460-163302-17	OB-30A-082418	Dissolved	Water	7470A	548366
460-163302-17	OB-30A-082418	Total/NA	Water	7470A	548362
460-163302-18	Dup-03-082418	Dissolved	Water	7470A	548366
460-163302-18	Dup-03-082418	Total/NA	Water	7470A	548362
460-163302-19	PMS-50-082418	Dissolved	Water	7470A	548366
460-163302-19	PMS-50-082418	Total/NA	Water	7470A	548362
460-163302-20	PMS-180-082418	Dissolved	Water	7470A	548366
460-163302-20	PMS-180-082418	Total/NA	Water	7470A	548362
460-163302-21	PMS-230-082418	Dissolved	Water	7470A	548366
460-163302-21	PMS-230-082418	Total/NA	Water	7470A	548362

Metals (Continued)

Analysis Batch: 548403 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-22	SC-01-082418	Dissolved	Water	7470A	548366
460-163302-22	SC-01-082418	Total/NA	Water	7470A	548362
460-163302-23	FB-03-082418	Dissolved	Water	7470A	548366
460-163302-23	FB-03-082418	Total/NA	Water	7470A	548362
460-163302-24	RW-5-082418	Dissolved	Water	7470A	548366
460-163302-24	RW-5-082418	Total/NA	Water	7470A	548365
MB 460-548361/1-B	Method Blank	Dissolved	Water	7470A	548366
MB 460-548362/1-A	Method Blank	Total/NA	Water	7470A	548362
MB 460-548365/1-A	Method Blank	Total/NA	Water	7470A	548365
LCS 460-548362/2-A	Lab Control Sample	Total/NA	Water	7470A	548362
LCS 460-548365/2-A	Lab Control Sample	Total/NA	Water	7470A	548365
LCS 460-548366/2-A	Lab Control Sample	Total/NA	Water	7470A	548366
460-163302-5 MS	CMS-50-082318	Total/NA	Water	7470A	548365
460-163302-21 MS	PMS-230-082418	Dissolved	Water	7470A	548366
460-163302-21 MS	PMS-230-082418	Total/NA	Water	7470A	548362
460-163302-5 DU	CMS-50-082318	Total/NA	Water	7470A	548365
460-163302-21 DU	PMS-230-082418	Dissolved	Water	7470A	548366
460-163302-21 DU	PMS-230-082418	Total/NA	Water	7470A	548362

Prep Batch: 548508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Dissolved	Water	3010A	548327
460-163302-2	OB-20A-082318	Dissolved	Water	3010A	548327
460-163302-3	RW-6-082318	Dissolved	Water	3010A	548327
460-163302-4	RW-6A-082318	Dissolved	Water	3010A	548327
460-163302-5	CMS-50-082318	Dissolved	Water	3010A	548327
460-163302-6	OB-30C-082318	Dissolved	Water	3010A	548327
460-163302-7	CMS-100-082318	Dissolved	Water	3010A	548327
460-163302-8	CMS-160-082318	Dissolved	Water	3010A	548327
460-163302-9	CMS-275-082318	Dissolved	Water	3010A	548327
460-163302-10	SC-02-082318	Dissolved	Water	3010A	548327
460-163302-11	OB-5-082318	Dissolved	Water	3010A	548327
460-163302-12	Dup-02-082318	Dissolved	Water	3010A	548327
460-163302-13	OB-12-082318	Dissolved	Water	3010A	548327
460-163302-14	OB-2-082318	Dissolved	Water	3010A	548327
460-163302-16	RW-13 (71-91)-082418	Dissolved	Water	3010A	548327
460-163302-17	OB-30A-082418	Dissolved	Water	3010A	548327
460-163302-18	Dup-03-082418	Dissolved	Water	3010A	548327
460-163302-19	PMS-50-082418	Dissolved	Water	3010A	548327
460-163302-20	PMS-180-082418	Dissolved	Water	3010A	548327
MB 460-548327/1-B	Method Blank	Dissolved	Water	3010A	548327
LCS 460-548508/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-163302-5 MS	CMS-50-082318	Dissolved	Water	3010A	548327
460-163302-5 DU	CMS-50-082318	Dissolved	Water	3010A	548327

Prep Batch: 548509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-5	CMS-50-082318	Total/NA	Water	3010A	
MB 460-548509/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-548509/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-163302-5 MS	CMS-50-082318	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 548509 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-5 DU	CMS-50-082318	Total/NA	Water	3010A	

Prep Batch: 548512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	3010A	
460-163302-2	OB-20A-082318	Total/NA	Water	3010A	
460-163302-3	RW-6-082318	Total/NA	Water	3010A	
460-163302-4	RW-6A-082318	Total/NA	Water	3010A	
460-163302-6	OB-30C-082318	Total/NA	Water	3010A	
460-163302-7	CMS-100-082318	Total/NA	Water	3010A	
460-163302-8	CMS-160-082318	Total/NA	Water	3010A	
460-163302-9	CMS-275-082318	Total/NA	Water	3010A	
460-163302-10	SC-02-082318	Total/NA	Water	3010A	
460-163302-11	OB-5-082318	Total/NA	Water	3010A	
MB 460-548512/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-548512/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-163407-J-1-C MS ^10	Matrix Spike	Total/NA	Water	3010A	
460-163407-J-1-C MS ^2	Matrix Spike	Total/NA	Water	3010A	
460-163407-J-1-B DU ^10	Duplicate	Total/NA	Water	3010A	
460-163407-J-1-B DU ^2	Duplicate	Total/NA	Water	3010A	

Prep Batch: 548513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-12	Dup-02-082318	Total/NA	Water	3010A	
460-163302-13	OB-12-082318	Total/NA	Water	3010A	
460-163302-14	OB-2-082318	Total/NA	Water	3010A	
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	3010A	
460-163302-17	OB-30A-082418	Total/NA	Water	3010A	
460-163302-18	Dup-03-082418	Total/NA	Water	3010A	
460-163302-19	PMS-50-082418	Total/NA	Water	3010A	
460-163302-20	PMS-180-082418	Total/NA	Water	3010A	
460-163302-21	PMS-230-082418	Total/NA	Water	3010A	
460-163302-22	SC-01-082418	Total/NA	Water	3010A	
460-163302-23	FB-03-082418	Total/NA	Water	3010A	
460-163302-24	RW-5-082418	Total/NA	Water	3010A	
MB 460-548513/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-548513/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-163302-21 MS	PMS-230-082418	Total/NA	Water	3010A	
460-163302-21 DU	PMS-230-082418	Total/NA	Water	3010A	

Analysis Batch: 548548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Dissolved	Water	6020B	548508
460-163302-2	OB-20A-082318	Dissolved	Water	6020B	548508
460-163302-3	RW-6-082318	Dissolved	Water	6020B	548508
460-163302-4	RW-6A-082318	Dissolved	Water	6020B	548508
460-163302-5	CMS-50-082318	Dissolved	Water	6020B	548508
460-163302-6	OB-30C-082318	Dissolved	Water	6020B	548508
460-163302-7	CMS-100-082318	Dissolved	Water	6020B	548508
460-163302-8	CMS-160-082318	Dissolved	Water	6020B	548508
460-163302-9	CMS-275-082318	Dissolved	Water	6020B	548508

Metals (Continued)

Analysis Batch: 548548 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-10	SC-02-082318	Dissolved	Water	6020B	548508
460-163302-11	OB-5-082318	Dissolved	Water	6020B	548508
460-163302-12	Dup-02-082318	Dissolved	Water	6020B	548508
460-163302-13	OB-12-082318	Dissolved	Water	6020B	548508
460-163302-14	OB-2-082318	Dissolved	Water	6020B	548508
460-163302-16	RW-13 (71-91)-082418	Dissolved	Water	6020B	548508
460-163302-17	OB-30A-082418	Dissolved	Water	6020B	548508
460-163302-18	Dup-03-082418	Dissolved	Water	6020B	548508
460-163302-19	PMS-50-082418	Dissolved	Water	6020B	548508
460-163302-20	PMS-180-082418	Dissolved	Water	6020B	548508
MB 460-548327/1-B	Method Blank	Dissolved	Water	6020B	548508
LCS 460-548508/2-A	Lab Control Sample	Total/NA	Water	6020B	548508
460-163302-5 MS	CMS-50-082318	Dissolved	Water	6020B	548508
460-163302-5 DU	CMS-50-082318	Dissolved	Water	6020B	548508

Filtration Batch: 548634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-5	CMS-50-082318	Dissolved	Water	FILTRATION	
460-163302-7	CMS-100-082318	Dissolved	Water	FILTRATION	
460-163302-8	CMS-160-082318	Dissolved	Water	FILTRATION	
460-163302-9	CMS-275-082318	Dissolved	Water	FILTRATION	
460-163302-10	SC-02-082318	Dissolved	Water	FILTRATION	
MB 460-548634/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163302-5 MS	CMS-50-082318	Dissolved	Water	FILTRATION	
460-163302-5 DU	CMS-50-082318	Dissolved	Water	FILTRATION	

Prep Batch: 548638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-5	CMS-50-082318	Dissolved	Water	7470A	548634
460-163302-7	CMS-100-082318	Dissolved	Water	7470A	548634
460-163302-8	CMS-160-082318	Dissolved	Water	7470A	548634
460-163302-9	CMS-275-082318	Dissolved	Water	7470A	548634
460-163302-10	SC-02-082318	Dissolved	Water	7470A	548634
MB 460-548634/1-B	Method Blank	Dissolved	Water	7470A	548634
LCS 460-548638/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163302-5 MS	CMS-50-082318	Dissolved	Water	7470A	548634
460-163302-5 DU	CMS-50-082318	Dissolved	Water	7470A	548634

Prep Batch: 548641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21	PMS-230-082418	Dissolved	Water	3010A	548327
460-163302-22	SC-01-082418	Dissolved	Water	3010A	548327
460-163302-23	FB-03-082418	Dissolved	Water	3010A	548327
460-163302-24	RW-5-082418	Dissolved	Water	3010A	548327
MB 460-548327/1-C	Method Blank	Dissolved	Water	3010A	548327
LCS 460-548641/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-163302-21 MS	PMS-230-082418	Dissolved	Water	3010A	548327
460-163302-21 DU	PMS-230-082418	Dissolved	Water	3010A	548327

Metals (Continued)

Analysis Batch: 548676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Dissolved	Water	6020B	548508
460-163302-2	OB-20A-082318	Dissolved	Water	6020B	548508
460-163302-3	RW-6-082318	Dissolved	Water	6020B	548508
460-163302-3	RW-6-082318	Dissolved	Water	6020B	548508
460-163302-4	RW-6A-082318	Dissolved	Water	6020B	548508
460-163302-4	RW-6A-082318	Dissolved	Water	6020B	548508
460-163302-4	RW-6A-082318	Dissolved	Water	6020B	548508
460-163302-5	CMS-50-082318	Dissolved	Water	6020B	548508
460-163302-6	OB-30C-082318	Dissolved	Water	6020B	548508
460-163302-7	CMS-100-082318	Dissolved	Water	6020B	548508
460-163302-8	CMS-160-082318	Dissolved	Water	6020B	548508
460-163302-9	CMS-275-082318	Dissolved	Water	6020B	548508
460-163302-10	SC-02-082318	Dissolved	Water	6020B	548508
460-163302-11	OB-5-082318	Dissolved	Water	6020B	548508
460-163302-12	Dup-02-082318	Dissolved	Water	6020B	548508
460-163302-13	OB-12-082318	Dissolved	Water	6020B	548508
460-163302-14	OB-2-082318	Dissolved	Water	6020B	548508
460-163302-16	RW-13 (71-91)-082418	Dissolved	Water	6020B	548508
460-163302-17	OB-30A-082418	Dissolved	Water	6020B	548508
460-163302-18	Dup-03-082418	Dissolved	Water	6020B	548508
460-163302-19	PMS-50-082418	Dissolved	Water	6020B	548508
460-163302-20	PMS-180-082418	Dissolved	Water	6020B	548508
MB 460-548327/1-B	Method Blank	Dissolved	Water	6020B	548508
LCS 460-548508/2-A	Lab Control Sample	Total/NA	Water	6020B	548508
460-163302-5 MS	CMS-50-082318	Dissolved	Water	6020B	548508
460-163302-5 DU	CMS-50-082318	Dissolved	Water	6020B	548508

Analysis Batch: 548687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	6020B	548512
460-163302-2	OB-20A-082318	Total/NA	Water	6020B	548512
460-163302-3	RW-6-082318	Total/NA	Water	6020B	548512
460-163302-4	RW-6A-082318	Total/NA	Water	6020B	548512
460-163302-6	OB-30C-082318	Total/NA	Water	6020B	548512
460-163302-7	CMS-100-082318	Total/NA	Water	6020B	548512
460-163302-8	CMS-160-082318	Total/NA	Water	6020B	548512
460-163302-9	CMS-275-082318	Total/NA	Water	6020B	548512
460-163302-10	SC-02-082318	Total/NA	Water	6020B	548512
460-163302-11	OB-5-082318	Total/NA	Water	6020B	548512
MB 460-548512/1-A ^2	Method Blank	Total/NA	Water	6020B	548512
LCS 460-548512/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	548512
460-163407-J-1-C MS ^2	Matrix Spike	Total/NA	Water	6020B	548512
460-163407-J-1-B DU ^2	Duplicate	Total/NA	Water	6020B	548512

Analysis Batch: 548694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-5	CMS-50-082318	Dissolved	Water	7470A	548638
460-163302-7	CMS-100-082318	Dissolved	Water	7470A	548638
460-163302-8	CMS-160-082318	Dissolved	Water	7470A	548638
460-163302-9	CMS-275-082318	Dissolved	Water	7470A	548638
460-163302-10	SC-02-082318	Dissolved	Water	7470A	548638

Metals (Continued)

Analysis Batch: 548694 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-548634/1-B	Method Blank	Dissolved	Water	7470A	548638
LCS 460-548638/2-A	Lab Control Sample	Total/NA	Water	7470A	548638
460-163302-5 MS	CMS-50-082318	Dissolved	Water	7470A	548638
460-163302-5 DU	CMS-50-082318	Dissolved	Water	7470A	548638

Analysis Batch: 548831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-5	CMS-50-082318	Total/NA	Water	6020B	548509
460-163302-6	OB-30C-082318	Dissolved	Water	6020B	548508
460-163302-7	CMS-100-082318	Dissolved	Water	6020B	548508
460-163302-8	CMS-160-082318	Dissolved	Water	6020B	548508
460-163302-9	CMS-275-082318	Dissolved	Water	6020B	548508
460-163302-10	SC-02-082318	Dissolved	Water	6020B	548508
460-163302-14	OB-2-082318	Dissolved	Water	6020B	548508
460-163302-16	RW-13 (71-91)-082418	Dissolved	Water	6020B	548508
460-163302-17	OB-30A-082418	Dissolved	Water	6020B	548508
460-163302-18	Dup-03-082418	Dissolved	Water	6020B	548508
MB 460-548509/1-A ^2	Method Blank	Total/NA	Water	6020B	548509
LCS 460-548509/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	548509
460-163302-5 MS	CMS-50-082318	Total/NA	Water	6020B	548509
460-163302-5 DU	CMS-50-082318	Total/NA	Water	6020B	548509

Analysis Batch: 548948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-11	OB-5-082318	Dissolved	Water	6020B	548508
460-163302-21	PMS-230-082418	Dissolved	Water	6020B	548641
460-163302-22	SC-01-082418	Dissolved	Water	6020B	548641
460-163302-23	FB-03-082418	Dissolved	Water	6020B	548641
460-163302-24	RW-5-082418	Dissolved	Water	6020B	548641
MB 460-548327/1-C	Method Blank	Dissolved	Water	6020B	548641
LCS 460-548641/2-A	Lab Control Sample	Total/NA	Water	6020B	548641
460-163302-21 MS	PMS-230-082418	Dissolved	Water	6020B	548641
460-163302-21 DU	PMS-230-082418	Dissolved	Water	6020B	548641

Analysis Batch: 548986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-8	CMS-160-082318	Total/NA	Water	6020B	548512
460-163302-9	CMS-275-082318	Total/NA	Water	6020B	548512
460-163302-12	Dup-02-082318	Total/NA	Water	6020B	548513
460-163302-13	OB-12-082318	Total/NA	Water	6020B	548513
460-163302-14	OB-2-082318	Total/NA	Water	6020B	548513
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	6020B	548513
460-163302-17	OB-30A-082418	Total/NA	Water	6020B	548513
460-163302-18	Dup-03-082418	Total/NA	Water	6020B	548513
460-163302-19	PMS-50-082418	Total/NA	Water	6020B	548513
460-163302-20	PMS-180-082418	Total/NA	Water	6020B	548513
460-163302-21	PMS-230-082418	Total/NA	Water	6020B	548513
460-163302-22	SC-01-082418	Total/NA	Water	6020B	548513
460-163302-23	FB-03-082418	Total/NA	Water	6020B	548513
460-163302-24	RW-5-082418	Total/NA	Water	6020B	548513
MB 460-548513/1-A ^2	Method Blank	Total/NA	Water	6020B	548513

Metals (Continued)

Analysis Batch: 548986 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-548513/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	548513
460-163302-21 MS	PMS-230-082418	Total/NA	Water	6020B	548513
460-163407-J-1-C MS ^10	Matrix Spike	Total/NA	Water	6020B	548512
460-163302-21 DU	PMS-230-082418	Total/NA	Water	6020B	548513
460-163407-J-1-B DU ^10	Duplicate	Total/NA	Water	6020B	548512

Prep Batch: 549147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-12	Dup-02-082318	Total/NA	Water	3010A	
460-163302-14	OB-2-082318	Total/NA	Water	3010A	
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	3010A	
460-163302-17	OB-30A-082418	Total/NA	Water	3010A	
460-163302-18	Dup-03-082418	Total/NA	Water	3010A	
460-163302-19	PMS-50-082418	Total/NA	Water	3010A	
460-163302-20	PMS-180-082418	Total/NA	Water	3010A	
460-163302-21	PMS-230-082418	Total/NA	Water	3010A	
460-163302-22	SC-01-082418	Total/NA	Water	3010A	
460-163302-23	FB-03-082418	Total/NA	Water	3010A	
460-163302-24	RW-5-082418	Total/NA	Water	3010A	
MB 460-549147/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-549147/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-163302-21 MS	PMS-230-082418	Total/NA	Water	3010A	
460-163302-21 DU	PMS-230-082418	Total/NA	Water	3010A	

Analysis Batch: 549568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-12	Dup-02-082318	Total/NA	Water	6020B	549147
460-163302-14	OB-2-082318	Total/NA	Water	6020B	549147
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	6020B	549147
460-163302-17	OB-30A-082418	Total/NA	Water	6020B	549147
460-163302-18	Dup-03-082418	Total/NA	Water	6020B	549147
460-163302-19	PMS-50-082418	Total/NA	Water	6020B	549147
460-163302-20	PMS-180-082418	Total/NA	Water	6020B	549147
460-163302-20	PMS-180-082418	Total/NA	Water	6020B	549147
460-163302-21	PMS-230-082418	Total/NA	Water	6020B	549147
460-163302-22	SC-01-082418	Total/NA	Water	6020B	549147
460-163302-23	FB-03-082418	Total/NA	Water	6020B	549147
460-163302-24	RW-5-082418	Total/NA	Water	6020B	549147
MB 460-549147/1-A ^2	Method Blank	Total/NA	Water	6020B	549147
LCS 460-549147/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	549147
460-163302-21 MS	PMS-230-082418	Total/NA	Water	6020B	549147
460-163302-21 DU	PMS-230-082418	Total/NA	Water	6020B	549147

Prep Batch: 550221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-23	FB-03-082418	Total/NA	Water	3010A	
MB 460-550221/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-550221/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-163794-J-2-C MS ^2	Matrix Spike	Total/NA	Water	3010A	
460-163794-J-2-B DU ^2	Duplicate	Total/NA	Water	3010A	

Metals (Continued)

Analysis Batch: 550760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-23	FB-03-082418	Total/NA	Water	6020B	550221
MB 460-550221/1-A ^2	Method Blank	Total/NA	Water	6020B	550221
460-163794-J-2-C MS ^2	Matrix Spike	Total/NA	Water	6020B	550221
460-163794-J-2-B DU ^2	Duplicate	Total/NA	Water	6020B	550221

Analysis Batch: 550921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-550221/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	550221

Analysis Batch: 551988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21	PMS-230-082418	Dissolved	Water	6020B	552068
460-163302-22	SC-01-082418	Dissolved	Water	6020B	552068
460-163302-23	FB-03-082418	Dissolved	Water	6020B	552068
460-163302-24	RW-5-082418	Dissolved	Water	6020B	552068
MB 460-552065/1-B	Method Blank	Dissolved	Water	6020B	552068
LCS 460-552068/2-A	Lab Control Sample	Total/NA	Water	6020B	552068
460-163302-21 MS	PMS-230-082418	Dissolved	Water	6020B	552068
460-163302-21 DU	PMS-230-082418	Dissolved	Water	6020B	552068

Filtration Batch: 552065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21	PMS-230-082418	Dissolved	Water	FILTRATION	
460-163302-22	SC-01-082418	Dissolved	Water	FILTRATION	
460-163302-23	FB-03-082418	Dissolved	Water	FILTRATION	
460-163302-24	RW-5-082418	Dissolved	Water	FILTRATION	
MB 460-552065/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163302-21 MS	PMS-230-082418	Dissolved	Water	FILTRATION	
460-163302-21 DU	PMS-230-082418	Dissolved	Water	FILTRATION	

Prep Batch: 552068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-21	PMS-230-082418	Dissolved	Water	3010A	552065
460-163302-22	SC-01-082418	Dissolved	Water	3010A	552065
460-163302-23	FB-03-082418	Dissolved	Water	3010A	552065
460-163302-24	RW-5-082418	Dissolved	Water	3010A	552065
MB 460-552065/1-B	Method Blank	Dissolved	Water	3010A	552065
LCS 460-552068/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-163302-21 MS	PMS-230-082418	Dissolved	Water	3010A	552065
460-163302-21 DU	PMS-230-082418	Dissolved	Water	3010A	552065

General Chemistry

Analysis Batch: 547667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	SM 2320B	
460-163302-2	OB-20A-082318	Total/NA	Water	SM 2320B	
460-163302-3	RW-6-082318	Total/NA	Water	SM 2320B	
460-163302-4	RW-6A-082318	Total/NA	Water	SM 2320B	
460-163302-5	CMS-50-082318	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 547667 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-6	OB-30C-082318	Total/NA	Water	SM 2320B	
460-163302-7	CMS-100-082318	Total/NA	Water	SM 2320B	
460-163302-8	CMS-160-082318	Total/NA	Water	SM 2320B	
460-163302-9	CMS-275-082318	Total/NA	Water	SM 2320B	
460-163302-10	SC-02-082318	Total/NA	Water	SM 2320B	
460-163302-11	OB-5-082318	Total/NA	Water	SM 2320B	
460-163302-12	Dup-02-082318	Total/NA	Water	SM 2320B	
460-163302-13	OB-12-082318	Total/NA	Water	SM 2320B	
460-163302-14	OB-2-082318	Total/NA	Water	SM 2320B	
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	SM 2320B	
460-163302-17	OB-30A-082418	Total/NA	Water	SM 2320B	
460-163302-18	Dup-03-082418	Total/NA	Water	SM 2320B	
460-163302-19	PMS-50-082418	Total/NA	Water	SM 2320B	
460-163302-20	PMS-180-082418	Total/NA	Water	SM 2320B	
460-163302-21	PMS-230-082418	Total/NA	Water	SM 2320B	
460-163302-22	SC-01-082418	Total/NA	Water	SM 2320B	
460-163302-23	FB-03-082418	Total/NA	Water	SM 2320B	
460-163302-24	RW-5-082418	Total/NA	Water	SM 2320B	
MB 460-547667/2	Method Blank	Total/NA	Water	SM 2320B	
MB 460-547667/25	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-547667/26	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSSRM 460-547667/3	Lab Control Sample	Total/NA	Water	SM 2320B	
460-163302-5 DU	CMS-50-082318	Total/NA	Water	SM 2320B	
460-163302-21 DU	PMS-230-082418	Total/NA	Water	SM 2320B	

Prep Batch: 548650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	9012B	
460-163302-2	OB-20A-082318	Total/NA	Water	9012B	
460-163302-3	RW-6-082318	Total/NA	Water	9012B	
460-163302-4	RW-6A-082318	Total/NA	Water	9012B	
460-163302-5	CMS-50-082318	Total/NA	Water	9012B	
460-163302-6	OB-30C-082318	Total/NA	Water	9012B	
460-163302-7	CMS-100-082318	Total/NA	Water	9012B	
460-163302-8	CMS-160-082318	Total/NA	Water	9012B	
460-163302-9	CMS-275-082318	Total/NA	Water	9012B	
460-163302-10	SC-02-082318	Total/NA	Water	9012B	
460-163302-11	OB-5-082318	Total/NA	Water	9012B	
460-163302-12	Dup-02-082318	Total/NA	Water	9012B	
460-163302-13	OB-12-082318	Total/NA	Water	9012B	
460-163302-14	OB-2-082318	Total/NA	Water	9012B	
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	9012B	
460-163302-17	OB-30A-082418	Total/NA	Water	9012B	
460-163302-18	Dup-03-082418	Total/NA	Water	9012B	
460-163302-19	PMS-50-082418	Total/NA	Water	9012B	
MB 460-548650/1-A	Method Blank	Total/NA	Water	9012B	
LCS 460-548650/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163302-5 MS	CMS-50-082318	Total/NA	Water	9012B	
460-163302-5 MSD	CMS-50-082318	Total/NA	Water	9012B	
460-163302-11 MS	OB-5-082318	Total/NA	Water	9012B	
460-163302-11 MSD	OB-5-082318	Total/NA	Water	9012B	

QC Association Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Prep Batch: 548890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-20	PMS-180-082418	Total/NA	Water	9012B	
460-163302-21	PMS-230-082418	Total/NA	Water	9012B	
460-163302-22	SC-01-082418	Total/NA	Water	9012B	
460-163302-23	FB-03-082418	Total/NA	Water	9012B	
460-163302-24	RW-5-082418	Total/NA	Water	9012B	
MB 460-548890/1-A	Method Blank	Total/NA	Water	9012B	
LCS 460-548890/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163302-21 MS	PMS-230-082418	Total/NA	Water	9012B	
460-163302-21 MSD	PMS-230-082418	Total/NA	Water	9012B	

Analysis Batch: 548949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163302-1	OB-20B-082318	Total/NA	Water	9012B	548650
460-163302-2	OB-20A-082318	Total/NA	Water	9012B	548650
460-163302-3	RW-6-082318	Total/NA	Water	9012B	548650
460-163302-4	RW-6A-082318	Total/NA	Water	9012B	548650
460-163302-5	CMS-50-082318	Total/NA	Water	9012B	548650
460-163302-6	OB-30C-082318	Total/NA	Water	9012B	548650
460-163302-7	CMS-100-082318	Total/NA	Water	9012B	548650
460-163302-8	CMS-160-082318	Total/NA	Water	9012B	548650
460-163302-9	CMS-275-082318	Total/NA	Water	9012B	548650
460-163302-10	SC-02-082318	Total/NA	Water	9012B	548650
460-163302-11	OB-5-082318	Total/NA	Water	9012B	548650
460-163302-12	Dup-02-082318	Total/NA	Water	9012B	548650
460-163302-13	OB-12-082318	Total/NA	Water	9012B	548650
460-163302-14	OB-2-082318	Total/NA	Water	9012B	548650
460-163302-16	RW-13 (71-91)-082418	Total/NA	Water	9012B	548650
460-163302-17	OB-30A-082418	Total/NA	Water	9012B	548650
460-163302-18	Dup-03-082418	Total/NA	Water	9012B	548650
460-163302-19	PMS-50-082418	Total/NA	Water	9012B	548650
460-163302-20	PMS-180-082418	Total/NA	Water	9012B	548890
460-163302-21	PMS-230-082418	Total/NA	Water	9012B	548890
460-163302-22	SC-01-082418	Total/NA	Water	9012B	548890
460-163302-23	FB-03-082418	Total/NA	Water	9012B	548890
460-163302-24	RW-5-082418	Total/NA	Water	9012B	548890
MB 460-548650/1-A	Method Blank	Total/NA	Water	9012B	548650
MB 460-548890/1-A	Method Blank	Total/NA	Water	9012B	548890
LCS 460-548650/2-A	Lab Control Sample	Total/NA	Water	9012B	548650
LCS 460-548890/2-A	Lab Control Sample	Total/NA	Water	9012B	548890
460-163302-5 MS	CMS-50-082318	Total/NA	Water	9012B	548650
460-163302-5 MSD	CMS-50-082318	Total/NA	Water	9012B	548650
460-163302-11 MS	OB-5-082318	Total/NA	Water	9012B	548650
460-163302-11 MSD	OB-5-082318	Total/NA	Water	9012B	548650
460-163302-21 MS	PMS-230-082418	Total/NA	Water	9012B	548890
460-163302-21 MSD	PMS-230-082418	Total/NA	Water	9012B	548890

Client Sample ID: OB-20B-082318

Lab Sample ID: 460-163302-1

Date Collected: 08/23/18 10:45

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D		1	547615	08/27/18 05:33	DAN	TAL EDI
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	547693	08/27/18 16:45	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 02:49	SK	TAL EDI
Total/NA	Prep	3510C			547718	08/27/18 09:27	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548111	08/29/18 04:20	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 17:05	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 03:29	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 13:37	MDC	TAL EDI
Total/NA	Prep	3010A			548512	08/30/18 00:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548687	08/30/18 21:45	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:49	RBS	TAL EDI
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 14:36	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:49	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 10:24	PHM	TAL EDI

Client Sample ID: OB-20A-082318

Lab Sample ID: 460-163302-2

Date Collected: 08/23/18 12:35

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548231	08/29/18 14:25	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	548540	08/30/18 13:15	SZD	TAL EDI
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D		1	547615	08/27/18 05:54	DAN	TAL EDI
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	547693	08/27/18 17:06	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 03:07	SK	TAL EDI
Total/NA	Prep	3510C			547718	08/27/18 09:27	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548111	08/29/18 04:35	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 17:16	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-20A-082318

Date Collected: 08/23/18 12:35
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 03:32	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 13:40	MDC	TAL EDI
Total/NA	Prep	3010A			548512	08/30/18 00:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548687	08/30/18 21:47	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:51	RBS	TAL EDI
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 14:37	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:50	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 10:30	PHM	TAL EDI

Client Sample ID: RW-6-082318

Date Collected: 08/23/18 14:25
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D		1	547615	08/27/18 06:15	DAN	TAL EDI
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	547693	08/27/18 17:28	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 03:25	SK	TAL EDI
Total/NA	Prep	3510C			547718	08/27/18 09:27	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548245	08/29/18 11:03	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 17:27	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	5	547825	08/27/18 21:21	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 03:39	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 13:54	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 15:52	MDC	TAL EDI
Total/NA	Prep	3010A			548512	08/30/18 00:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548687	08/30/18 21:50	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI

Client Sample ID: RW-6-082318

Lab Sample ID: 460-163302-3

Date Collected: 08/23/18 14:25

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	548403	08/29/18 16:58	RBS	TAL EDI
Total/NA	Prep	7470A			548365	08/29/18 12:41	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 15:50	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:51	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 10:39	PHM	TAL EDI

Client Sample ID: RW-6A-082318

Lab Sample ID: 460-163302-4

Date Collected: 08/23/18 15:45

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D		1	547615	08/27/18 06:36	DAN	TAL EDI
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	547693	08/27/18 17:49	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 03:43	SK	TAL EDI
Total/NA	Prep	3510C			547718	08/27/18 09:27	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548245	08/29/18 11:27	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 17:39	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 03:53	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 13:57	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 15:59	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		10	548676	08/30/18 16:06	MDC	TAL EDI
Total/NA	Prep	3010A			548512	08/30/18 00:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548687	08/30/18 22:01	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 17:00	RBS	TAL EDI
Total/NA	Prep	7470A			548365	08/29/18 12:41	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 15:51	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:52	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 10:47	PHM	TAL EDI

Client Sample ID: CMS-50-082318

Lab Sample ID: 460-163302-5

Date Collected: 08/23/18 09:15

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D		1	547615	08/27/18 04:09	DAN	TAL EDI
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	547693	08/27/18 16:03	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 01:56	SK	TAL EDI
Total/NA	Prep	3510C			547718	08/27/18 09:27	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548111	08/29/18 00:04	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 17:50	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	50	547825	08/27/18 21:34	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 03:22	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 13:27	MDC	TAL EDI
Total/NA	Prep	3010A			548509	08/30/18 00:10	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548831	08/31/18 00:25	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548634	08/30/18 12:34	RBS	TAL EDI
Dissolved	Prep	7470A			548638	08/30/18 12:57	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548694	08/30/18 15:04	RBS	TAL EDI
Total/NA	Prep	7470A			548365	08/29/18 12:41	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 15:41	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:46	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 11:34	PHM	TAL EDI

Client Sample ID: OB-30C-082318

Lab Sample ID: 460-163302-6

Date Collected: 08/23/18 14:55

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548123	08/28/18 23:56	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	548540	08/30/18 14:25	SZD	TAL EDI
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D		1	547615	08/27/18 06:57	DAN	TAL EDI
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	547693	08/27/18 18:10	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 04:01	SK	TAL EDI
Total/NA	Prep	3510C			547718	08/27/18 09:27	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548111	08/29/18 05:23	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 18:57	VMI	TAL EDI

Client Sample ID: OB-30C-082318

Lab Sample ID: 460-163302-6

Date Collected: 08/23/18 14:55

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A	DL	10	547825	08/27/18 22:42	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 03:56	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 14:01	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548831	08/30/18 22:48	VAD	TAL EDI
Total/NA	Prep	3010A			548512	08/30/18 00:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548687	08/30/18 22:03	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 17:02	RBS	TAL EDI
Total/NA	Prep	7470A			548365	08/29/18 12:41	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 15:57	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:52	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 10:56	PHM	TAL EDI

Client Sample ID: CMS-100-082318

Lab Sample ID: 460-163302-7

Date Collected: 08/23/18 10:15

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D		1	547615	08/27/18 07:18	DAN	TAL EDI
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	547693	08/27/18 18:31	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 04:19	SK	TAL EDI
Total/NA	Prep	3510C			547718	08/27/18 09:27	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548111	08/29/18 05:39	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 19:09	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	50	547825	08/27/18 23:21	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 04:00	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 14:06	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI

Client Sample ID: CMS-100-082318

Lab Sample ID: 460-163302-7

Date Collected: 08/23/18 10:15

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020B		2	548831	08/30/18 22:51	VAD	TAL EDI
Total/NA	Prep	3010A			548512	08/30/18 00:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548687	08/30/18 22:06	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548634	08/30/18 12:34	RBS	TAL EDI
Dissolved	Prep	7470A			548638	08/30/18 12:57	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548694	08/30/18 15:20	RBS	TAL EDI
Total/NA	Prep	7470A			548365	08/29/18 12:41	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 15:58	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:53	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 11:04	PHM	TAL EDI

Client Sample ID: CMS-160-082318

Lab Sample ID: 460-163302-8

Date Collected: 08/23/18 11:35

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D		1	547615	08/27/18 07:39	DAN	TAL EDI
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	547693	08/27/18 18:52	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 04:37	SK	TAL EDI
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548465	08/30/18 11:52	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 19:20	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	50	547825	08/27/18 23:34	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 04:03	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 14:09	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548831	08/30/18 22:58	VAD	TAL EDI
Total/NA	Prep	3010A			548512	08/30/18 00:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548687	08/30/18 22:09	PHP	TAL EDI
Total/NA	Prep	3010A			548512	08/30/18 00:50	GAE	TAL EDI
Total/NA	Analysis	6020B		10	548986	08/31/18 13:08	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548634	08/30/18 12:34	RBS	TAL EDI
Dissolved	Prep	7470A			548638	08/30/18 12:57	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548694	08/30/18 15:15	RBS	TAL EDI
Total/NA	Prep	7470A			548365	08/29/18 12:41	RBS	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: CMS-160-082318

Date Collected: 08/23/18 11:35
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7470A		1	548403	08/29/18 16:00	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:54	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 11:11	PHM	TAL EDI

Client Sample ID: CMS-275-082318

Date Collected: 08/23/18 12:45
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D		1	547615	08/27/18 08:00	DAN	TAL EDI
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	547693	08/27/18 19:13	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 04:55	SK	TAL EDI
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548465	08/30/18 12:08	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 19:31	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	20	547825	08/27/18 23:47	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 04:06	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 14:12	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548831	08/30/18 23:05	VAD	TAL EDI
Total/NA	Prep	3010A			548512	08/30/18 00:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548687	08/30/18 22:11	PHP	TAL EDI
Total/NA	Prep	3010A			548512	08/30/18 00:50	GAE	TAL EDI
Total/NA	Analysis	6020B		10	548986	08/31/18 13:10	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548634	08/30/18 12:34	RBS	TAL EDI
Dissolved	Prep	7470A			548638	08/30/18 12:57	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548694	08/30/18 15:16	RBS	TAL EDI
Total/NA	Prep	7470A			548365	08/29/18 12:41	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 16:02	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:59	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 11:51	PHM	TAL EDI

Client Sample ID: SC-02-082318

Lab Sample ID: 460-163302-10

Date Collected: 08/23/18 15:50

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548123	08/29/18 01:29	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	548540	08/30/18 15:58	SZD	TAL EDI
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D		1	547615	08/27/18 08:21	DAN	TAL EDI
Total/NA	Prep	3510C			547574	08/26/18 16:46	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	547693	08/27/18 19:34	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 05:12	SK	TAL EDI
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548386	08/29/18 19:10	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 19:43	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	5	547825	08/28/18 00:01	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 04:10	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 14:16	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548831	08/30/18 23:21	VAD	TAL EDI
Total/NA	Prep	3010A			548512	08/30/18 00:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548687	08/30/18 22:14	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548634	08/30/18 12:34	RBS	TAL EDI
Dissolved	Prep	7470A			548638	08/30/18 12:57	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548694	08/30/18 15:18	RBS	TAL EDI
Total/NA	Prep	7470A			548365	08/29/18 12:41	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 16:04	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:59	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 11:59	PHM	TAL EDI

Client Sample ID: OB-5-082318

Lab Sample ID: 460-163302-11

Date Collected: 08/23/18 10:20

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548123	08/29/18 01:52	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	548540	08/30/18 16:22	SZD	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547625	08/27/18 05:30	SK	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547710	08/27/18 17:32	SK	TAL EDI

Client Sample ID: OB-5-082318

Lab Sample ID: 460-163302-11

Date Collected: 08/23/18 10:20

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 05:30	SK	TAL EDI
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548465	08/30/18 12:24	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 19:54	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	25	547825	08/28/18 00:14	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 04:13	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 14:28	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548948	08/31/18 12:38	MDC	TAL EDI
Total/NA	Prep	3010A			548512	08/30/18 00:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548687	08/30/18 22:17	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:31	RBS	TAL EDI
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 14:17	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 11:00	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 12:07	PHM	TAL EDI

Client Sample ID: Dup-02-082318

Lab Sample ID: 460-163302-12

Date Collected: 08/23/18 12:00

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548123	08/29/18 02:16	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	548540	08/30/18 16:45	SZD	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547625	08/27/18 05:51	SK	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547710	08/27/18 17:53	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 05:48	SK	TAL EDI
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548386	08/29/18 19:42	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 20:05	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI

Client Sample ID: Dup-02-082318

Lab Sample ID: 460-163302-12

Date Collected: 08/23/18 12:00

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 04:17	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 15:38	MDC	TAL EDI
Total/NA	Prep	3010A			548513	08/30/18 01:40	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548986	08/31/18 15:09	PHP	TAL EDI
Total/NA	Prep	3010A			549147	09/01/18 04:28	GAE	TAL EDI
Total/NA	Analysis	6020B		2	549568	09/05/18 03:59	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:32	RBS	TAL EDI
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 14:18	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 11:03	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 12:13	PHM	TAL EDI

Client Sample ID: OB-12-082318

Lab Sample ID: 460-163302-13

Date Collected: 08/23/18 11:50

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548123	08/29/18 02:40	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	548540	08/30/18 17:09	SZD	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547625	08/27/18 06:12	SK	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547710	08/27/18 18:14	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 06:06	SK	TAL EDI
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548386	08/29/18 19:58	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 20:16	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 04:23	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 15:45	MDC	TAL EDI
Total/NA	Prep	3010A			548513	08/30/18 01:40	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548986	08/31/18 15:12	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI

Client Sample ID: OB-12-082318

Lab Sample ID: 460-163302-13

Date Collected: 08/23/18 11:50

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	548403	08/29/18 16:34	RBS	TAL EDI
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 14:20	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 11:04	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 12:21	PHM	TAL EDI

Client Sample ID: OB-2-082318

Lab Sample ID: 460-163302-14

Date Collected: 08/23/18 14:20

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548123	08/29/18 03:03	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	548540	08/30/18 17:32	SZD	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547625	08/27/18 06:33	SK	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547710	08/27/18 18:36	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 06:24	SK	TAL EDI
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548386	08/29/18 20:14	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 20:50	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 04:37	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 16:23	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548831	08/30/18 23:28	VAD	TAL EDI
Total/NA	Prep	3010A			548513	08/30/18 01:40	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548986	08/31/18 15:15	PHP	TAL EDI
Total/NA	Prep	3010A			549147	09/01/18 04:28	GAE	TAL EDI
Total/NA	Analysis	6020B		2	549568	09/05/18 04:02	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:36	RBS	TAL EDI
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 14:22	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 11:05	RAK	TAL EDI

Client Sample ID: OB-2-082318

Lab Sample ID: 460-163302-14

Date Collected: 08/23/18 14:20

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 12:29	PHM	TAL EDI

Client Sample ID: TB-03-082418

Lab Sample ID: 460-163302-15

Date Collected: 08/24/18 00:00

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548123	08/28/18 20:25	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	548540	08/30/18 10:54	SZD	TAL EDI

Client Sample ID: RW-13 (71-91)-082418

Lab Sample ID: 460-163302-16

Date Collected: 08/24/18 10:15

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548123	08/29/18 03:26	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	548540	08/30/18 17:55	SZD	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547625	08/27/18 06:54	SK	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547710	08/27/18 18:57	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 06:42	SK	TAL EDI
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548386	08/29/18 20:30	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 21:02	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	20	547825	08/28/18 00:28	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 04:41	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 16:30	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548831	08/30/18 23:35	VAD	TAL EDI
Total/NA	Prep	3010A			548513	08/30/18 01:40	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548986	08/31/18 15:28	PHP	TAL EDI
Total/NA	Prep	3010A			549147	09/01/18 04:28	GAE	TAL EDI
Total/NA	Analysis	6020B		2	549568	09/05/18 04:04	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:37	RBS	TAL EDI

Client Sample ID: RW-13 (71-91)-082418

Lab Sample ID: 460-163302-16

Date Collected: 08/24/18 10:15

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 14:24	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 11:05	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 12:36	PHM	TAL EDI

Client Sample ID: OB-30A-082418

Lab Sample ID: 460-163302-17

Date Collected: 08/24/18 12:20

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548123	08/29/18 03:50	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	548540	08/30/18 18:19	SZD	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547625	08/27/18 07:15	SK	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547710	08/27/18 19:18	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 07:00	SK	TAL EDI
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548386	08/29/18 20:46	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 21:13	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	10	547825	08/28/18 00:41	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 04:44	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 16:37	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548831	08/30/18 23:42	VAD	TAL EDI
Total/NA	Prep	3010A			548513	08/30/18 01:40	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548986	08/31/18 15:31	PHP	TAL EDI
Total/NA	Prep	3010A			549147	09/01/18 04:28	GAE	TAL EDI
Total/NA	Analysis	6020B		2	549568	09/05/18 04:07	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:39	RBS	TAL EDI
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 14:25	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 11:06	RAK	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: OB-30A-082418

Date Collected: 08/24/18 12:20
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 12:43	PHM	TAL EDI

Client Sample ID: Dup-03-082418

Date Collected: 08/24/18 12:00
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548123	08/29/18 04:13	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	548858	08/31/18 11:08	SZD	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547625	08/27/18 07:36	SK	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547710	08/27/18 19:39	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 07:18	SK	TAL EDI
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548386	08/29/18 21:02	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 21:24	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	20	547825	08/28/18 00:55	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 04:47	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 16:44	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548831	08/30/18 23:49	VAD	TAL EDI
Total/NA	Prep	3010A			548513	08/30/18 01:40	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548986	08/31/18 15:33	PHP	TAL EDI
Total/NA	Prep	3010A			549147	09/01/18 04:28	GAE	TAL EDI
Total/NA	Analysis	6020B		2	549568	09/05/18 04:12	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:41	RBS	TAL EDI
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 14:27	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 11:11	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 12:51	PHM	TAL EDI

Client Sample ID: PMS-50-082418

Date Collected: 08/24/18 08:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548231	08/29/18 15:12	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	548858	08/31/18 11:31	SZD	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547625	08/27/18 07:57	SK	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547710	08/27/18 20:01	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 07:36	SK	TAL EDI
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548386	08/29/18 21:18	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 21:36	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 04:51	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 17:25	MDC	TAL EDI
Total/NA	Prep	3010A			548513	08/30/18 01:40	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548986	08/31/18 15:36	PHP	TAL EDI
Total/NA	Prep	3010A			549147	09/01/18 04:28	GAE	TAL EDI
Total/NA	Analysis	6020B		2	549568	09/05/18 04:18	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:46	RBS	TAL EDI
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 14:29	RBS	TAL EDI
Total/NA	Prep	9012B			548650	08/30/18 13:50	EMS	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 11:12	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 12:58	PHM	TAL EDI

Client Sample ID: PMS-180-082418

Date Collected: 08/24/18 09:40
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548231	08/29/18 15:35	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	548858	08/31/18 11:54	SZD	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547625	08/27/18 08:18	SK	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547710	08/27/18 20:22	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:04	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 07:54	SK	TAL EDI

Client Sample ID: PMS-180-082418

Lab Sample ID: 460-163302-20

Date Collected: 08/24/18 09:40

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548386	08/29/18 21:34	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 21:47	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548548	08/30/18 04:54	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548508	08/30/18 01:59	VAD	TAL EDI
Dissolved	Analysis	6020B		2	548676	08/30/18 17:18	MDC	TAL EDI
Total/NA	Prep	3010A			548513	08/30/18 01:40	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548986	08/31/18 15:39	PHP	TAL EDI
Total/NA	Prep	3010A			549147	09/01/18 04:28	GAE	TAL EDI
Total/NA	Analysis	6020B		2	549568	09/05/18 04:28	MDC	TAL EDI
Total/NA	Prep	3010A			549147	09/01/18 04:28	GAE	TAL EDI
Total/NA	Analysis	6020B		20	549568	09/05/18 04:34	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:48	RBS	TAL EDI
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 14:34	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:13	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 13:07	PHM	TAL EDI

Client Sample ID: PMS-230-082418

Lab Sample ID: 460-163302-21

Date Collected: 08/24/18 11:15

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548231	08/29/18 12:05	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	548858	08/31/18 10:44	SZD	TAL EDI
Total/NA	Prep	3510C			548149	08/28/18 20:11	GRB	TAL EDI
Total/NA	Analysis	8270D		1	548257	08/29/18 11:41	DAN	TAL EDI
Total/NA	Prep	3510C			548149	08/28/18 20:11	GRB	TAL EDI
Total/NA	Analysis	8270D SIM		1	548270	08/29/18 13:45	SK	TAL EDI
Total/NA	Prep	3510C			547677	08/27/18 08:13	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		2	548328	08/29/18 11:34	SK	TAL EDI
Total/NA	Prep	3510C			548315	08/29/18 09:36	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548752	08/31/18 02:57	JHP	TAL EDI
Total/NA	Analysis	9056A		1	547565	08/26/18 21:03	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	4	547726	08/27/18 13:31	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:20	MDC	TAL EDI
Dissolved	Prep	3010A			548641	08/30/18 13:04	MDC	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: PMS-230-082418

Date Collected: 08/24/18 11:15
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020B		2	548948	08/31/18 10:56	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			552065	09/14/18 00:40	VAD	TAL EDI
Dissolved	Prep	3010A			552068	09/14/18 01:10	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551988	09/14/18 01:47	PHP	TAL EDI
Total/NA	Prep	3010A			548513	08/30/18 01:40	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548986	08/31/18 14:59	PHP	TAL EDI
Total/NA	Prep	3010A			549147	09/01/18 04:28	GAE	TAL EDI
Total/NA	Analysis	6020B		2	549568	09/05/18 03:35	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:09	RBS	TAL EDI
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 13:56	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:14	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 08:03	PHM	TAL EDI

Client Sample ID: SC-01-082418

Date Collected: 08/24/18 12:50
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547625	08/27/18 08:39	SK	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547710	08/27/18 20:43	SK	TAL EDI
Total/NA	Prep	3510C			547674	08/27/18 08:09	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547927	08/28/18 08:12	SK	TAL EDI
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548386	08/29/18 21:50	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547563	08/26/18 21:58	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:26	MDC	TAL EDI
Dissolved	Prep	3010A			548641	08/30/18 13:04	MDC	TAL EDI
Dissolved	Analysis	6020B		2	548948	08/31/18 11:03	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			552065	09/14/18 00:40	VAD	TAL EDI
Dissolved	Prep	3010A			552068	09/14/18 01:10	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551988	09/14/18 01:53	PHP	TAL EDI
Total/NA	Prep	3010A			548513	08/30/18 01:40	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548986	08/31/18 15:41	PHP	TAL EDI
Total/NA	Prep	3010A			549147	09/01/18 04:28	GAE	TAL EDI
Total/NA	Analysis	6020B		2	549568	09/05/18 04:39	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:53	RBS	TAL EDI

Client Sample ID: SC-01-082418

Lab Sample ID: 460-163302-22

Date Collected: 08/24/18 12:50

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 14:39	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:17	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 13:21	PHM	TAL EDI

Client Sample ID: FB-03-082418

Lab Sample ID: 460-163302-23

Date Collected: 08/24/18 12:30

Matrix: Water

Date Received: 08/24/18 17:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548231	08/29/18 14:01	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	548858	08/31/18 10:21	SZD	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D		1	547625	08/27/18 09:00	SK	TAL EDI
Total/NA	Prep	3510C			547599	08/26/18 18:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM		1	547710	08/27/18 21:04	SK	TAL EDI
Total/NA	Prep	3510C			547677	08/27/18 08:13	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547993	08/28/18 11:00	SK	TAL EDI
Total/NA	Prep	3510C			548017	08/28/18 09:19	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548386	08/29/18 22:06	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	547565	08/26/18 21:54	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:26	MDC	TAL EDI
Dissolved	Prep	3010A			548641	08/30/18 13:04	MDC	TAL EDI
Dissolved	Analysis	6020B		2	548948	08/31/18 11:06	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			552065	09/14/18 00:40	VAD	TAL EDI
Dissolved	Prep	3010A			552068	09/14/18 01:10	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551988	09/14/18 01:37	PHP	TAL EDI
Total/NA	Prep	3010A			548513	08/30/18 01:40	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548986	08/31/18 16:01	PHP	TAL EDI
Total/NA	Prep	3010A			549147	09/01/18 04:28	GAE	TAL EDI
Total/NA	Analysis	6020B		2	549568	09/05/18 04:47	MDC	TAL EDI
Total/NA	Prep	3010A			550221	09/06/18 23:55	GAE	TAL EDI
Total/NA	Analysis	6020B		2	550760	09/08/18 23:06	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:55	RBS	TAL EDI
Total/NA	Prep	7470A			548362	08/29/18 12:26	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 14:41	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:17	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 13:40	PHM	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Client Sample ID: RW-5-082418

Date Collected: 08/24/18 11:55
Date Received: 08/24/18 17:10

Lab Sample ID: 460-163302-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548231	08/29/18 16:22	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	548858	08/31/18 12:40	SZD	TAL EDI
Total/NA	Prep	3510C			548149	08/28/18 20:11	GRB	TAL EDI
Total/NA	Analysis	8270D		1	548257	08/29/18 14:09	DAN	TAL EDI
Total/NA	Prep	3510C			548149	08/28/18 20:11	GRB	TAL EDI
Total/NA	Analysis	8270D SIM		1	548270	08/29/18 14:07	SK	TAL EDI
Total/NA	Prep	3510C			547677	08/27/18 08:13	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	547993	08/28/18 11:18	SK	TAL EDI
Total/NA	Prep	3510C			548315	08/29/18 09:36	SXG	TAL EDI
Total/NA	Analysis	8082A		1	548447	08/30/18 00:25	CDC	TAL EDI
Total/NA	Analysis	9056A		1	547565	08/26/18 22:07	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			548327	08/29/18 10:28	MDC	TAL EDI
Dissolved	Prep	3010A			548641	08/30/18 13:04	MDC	TAL EDI
Dissolved	Analysis	6020B		2	548948	08/31/18 11:13	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			552065	09/14/18 00:40	VAD	TAL EDI
Dissolved	Prep	3010A			552068	09/14/18 01:10	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551988	09/14/18 01:58	PHP	TAL EDI
Total/NA	Prep	3010A			548513	08/30/18 01:40	GAE	TAL EDI
Total/NA	Analysis	6020B		2	548986	08/31/18 15:46	PHP	TAL EDI
Total/NA	Prep	3010A			549147	09/01/18 04:28	GAE	TAL EDI
Total/NA	Analysis	6020B		2	549568	09/05/18 04:50	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548361	08/29/18 12:19	RBS	TAL EDI
Dissolved	Prep	7470A			548366	08/29/18 12:45	RBS	TAL EDI
Dissolved	Analysis	7470A		1	548403	08/29/18 16:56	RBS	TAL EDI
Total/NA	Prep	7470A			548365	08/29/18 12:41	RBS	TAL EDI
Total/NA	Analysis	7470A		1	548403	08/29/18 15:48	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:22	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	547667	08/26/18 13:31	PHM	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	12028	06-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	Ethylene Dibromide
8270D SIM	3510C	Water	Bis(2-chloroethyl)ether
9056A		Water	Chloride
9056A		Water	Sulfate

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL EDI
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
9056A	Anions, Ion Chromatography	SW846	TAL EDI
6020B	Metals (ICP/MS)	SW846	TAL EDI
7470A	Mercury (CVAA)	SW846	TAL EDI
9012B	Cyanide, Total andor Amenable	SW846	TAL EDI
SM 2320B	Alkalinity	SM	TAL EDI
3010A	Preparation, Total Metals	SW846	TAL EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI
7470A	Preparation, Mercury	SW846	TAL EDI
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL EDI
FILTRATION	Sample Filtration	None	TAL EDI

Protocol References:

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163302-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-163302-1	OB-20B-082318	Water	08/23/18 10:45	08/24/18 17:10
460-163302-2	OB-20A-082318	Water	08/23/18 12:35	08/24/18 17:10
460-163302-3	RW-6-082318	Water	08/23/18 14:25	08/24/18 17:10
460-163302-4	RW-6A-082318	Water	08/23/18 15:45	08/24/18 17:10
460-163302-5	CMS-50-082318	Water	08/23/18 09:15	08/24/18 17:10
460-163302-6	OB-30C-082318	Water	08/23/18 14:55	08/24/18 17:10
460-163302-7	CMS-100-082318	Water	08/23/18 10:15	08/24/18 17:10
460-163302-8	CMS-160-082318	Water	08/23/18 11:35	08/24/18 17:10
460-163302-9	CMS-275-082318	Water	08/23/18 12:45	08/24/18 17:10
460-163302-10	SC-02-082318	Water	08/23/18 15:50	08/24/18 17:10
460-163302-11	OB-5-082318	Water	08/23/18 10:20	08/24/18 17:10
460-163302-12	Dup-02-082318	Water	08/23/18 12:00	08/24/18 17:10
460-163302-13	OB-12-082318	Water	08/23/18 11:50	08/24/18 17:10
460-163302-14	OB-2-082318	Water	08/23/18 14:20	08/24/18 17:10
460-163302-15	TB-03-082418	Water	08/24/18 00:00	08/24/18 17:10
460-163302-16	RW-13 (71-91)-082418	Water	08/24/18 10:15	08/24/18 17:10
460-163302-17	OB-30A-082418	Water	08/24/18 12:20	08/24/18 17:10
460-163302-18	Dup-03-082418	Water	08/24/18 12:00	08/24/18 17:10
460-163302-19	PMS-50-082418	Water	08/24/18 08:50	08/24/18 17:10
460-163302-20	PMS-180-082418	Water	08/24/18 09:40	08/24/18 17:10
460-163302-21	PMS-230-082418	Water	08/24/18 11:15	08/24/18 17:10
460-163302-22	SC-01-082418	Water	08/24/18 12:50	08/24/18 17:10
460-163302-23	FB-03-082418	Water	08/24/18 12:30	08/24/18 17:10
460-163302-24	RW-5-082418	Water	08/24/18 11:55	08/24/18 17:10

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALY

460-163302 Chain of Custody

ım Road
ersey 08817
49-3900 Fax: (732) 549-3679

9/14/2018

Name (for report and invoice) Tim Roeper	Samplers Name (Printed) Robert Lautenberg	Site/Project Identification Ringwood
Company Cornerstone Environmental Group	P. O. # 180361-006	State (Location of site): NJ: X NY: Other:
		Regulatory Program: DKQP:
Address 100 Crystal Run Rd., Suite 101	Analysis Turnaround Time: Standard X	
City Middletown State NY 10941	Rush Charges Authorized For: 2 Week / 1 Week / Other	
Phone 845 695 0200 Fax		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL Vocs + TICs w/ SIM	TCL BNAs/SVOCs w/ SIM	1,4 Dioxane by Isotope Dilution	PCBs	Chloride	Sulfate	Alkalinity	TAL metals	Dissolved TAL Metals	Total Cyanide		LAB USE ONLY Sample Numbers
OB-20B-082318	8/23/18	10:45	GW	15	X	X	X	X	X	X	X	X	X	X		1
OB-20A-082318	8/23/18	12:35	GW	15	X	X	X	X	X	X	X	X	X	X		2
RW-6-082318	8/23/18	14:25	GW	15	X	X	X	X	X	X	X	X	X	X		3
RW-6A-082318	8/23/18	15:45	GW	15	X	X	X	X	X	X	X	X	X	X		4
CMS-50-082318	8/23/18	09:15	GW	15	X	X	X	X	X	X	X	X	X	X		5
CMS-50-082318 MS	8/23/18	09:15	GW	15	X	X	X	X	X	X	X	X	X	X		5
CMS-50-082318 MSD	8/23/18	09:15	GW	15	X	X	X	X	X	X	X	X	X	X		5
OB-30C-082318	8/23/18	14:55	GW	15	X	X	X	X	X	X	X	X	X	X		6
CMS-100-082318	8/23/18	10:15	GW	15	X	X	X	X	X	X	X	X	X	X		7
CMS-160-082318	8/23/18	11:35	GW	15	X	X	X	X	X	X	X	X	X	X		8
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, Soil:																
6 = Other _____, 7 = Other _____ Water:					2	1	1	1	1	1	1	4	1	5		

Special Instructions

Water Metals Filtered (Yes/No)? No

Relinquished by	Company	Date / Time	Received by	Company
1)	Cornerstone	8/24/18 15 10	1) Tim Yap	TA Edison
Relinquished by 2) Tim Yap	Company TA Edison	Date / Time 8/24/18 1710	Received by 2)	Company TA Edi
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

IR # 9 0.8°C, 0.4°C 0.4°C 0.6°C 0.8°C 0.5°C 0.7°C 1.0°C 0.9°C 0.7°C

NOCS

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

9/14/2018

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CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Tim Roeper	Samplers Name (Printed): Robert Lautenberg	Site/Project Identification: Ringwood
Company: Cornerstone Environmental Group	P. O. #: 180361-006	State (Location of site): NJ: X NY: Other:
Address: 100 Crystal Run Rd., Suite 101	Analysis Turnaround Time: Standard X	Regulatory Program: DKQP:
City: Middletown State: NY 10941	Rush Charges Authorized For: 2 Week 1 Week Other	LAB USE ONLY Project No:
Phone: 845 695 0200 Fax:		Job No: 163302

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOC's + 15 TICs w/ STAT	TCL BNA/SVOC's w/ STAT	1,4 Dioxane by Isotope Dilution	PCB's	Chloride	Sulfate	Alkalinity	TAL Metals	Dissolved TAL Metals	Total Cyanide	Sample Numbers
CMS-275-082318	8/23/18	12:45	GW	15	X	X	X	X	X	X	X	X	X	X	9
SC-02-082318	8/23/18	15:50	GW	15	X	X	X	X	X	X	X	X	X	X	10
OB-5-082318	8/23/18	10:20	GW	15	X	X	X	X	X	X	X	X	X	X	11
Dup-02-082318	8/23/18	12:00	GW	15	X	X	X	X	X	X	X	X	X	X	12
OB-12-082318	8/23/18	11:50	GW	15	X	X	X	X	X	X	X	X	X	X	13
OB-2-082318	8/23/18	14:20	GW	15	X	X	X	X	X	X	X	X	X	X	14
TB-03-082418	8/24/18	-	BW	3	X										15
RW-13(71-91)-082418	8/24/18	10:15	GW	15	X	X	X	X	X	X	X	X	X	X	16
OB-30A-082418	8/24/18	12:20	GW	15	X	X	X	X	X	X	X	X	X	X	17
Dup-03-082418	8/24/18	12:00	GW	15	X	X	X	X	X	X	X	X	X	X	18
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:															
6 = Other _____, 7 = Other _____ — Water:					2	1	1	1	1	1	1	4	1	5	

Special Instructions

Water Metals Filtered (Yes/No)? NO

Relinquished by	Company	Date / Time	Received by	Company
1)	Cornerstone	8/24/18 1510	1) Tim Yap	TA EDISON
2) Tim Yap	TA EDISON	8/24/18 1710	2)	TAEDI
3)			3)	
4)			4)	

NO CS

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

IR # 9 0.8°C 0.9°C 0.4°C 0.6°C 0.8°C 0.5°C 0.7°C 1.0°C 0.9°C 0.7°C

(10) C

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

9/14/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice)	Samplers Name (Printed)	Site/Project Identification
Tim Roeper	Dan Wheeler	Ringwood
Company	P. O. #	State (Location of site): NJ: ☒ NY: ☐ Other:
Cornerstone Environmental Group	180361-006	Regulatory Program: DKQP: ☐
Address	Analysis Turnaround Time	
100 Crystal Run Rd suite 101	Standard ☒	
City State	Rush Charges Authorized For:	
Middletown NY 10941	2 Week ☐	
Phone Fax	1 Week ☐	
845-695-0200	Other ☐	

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs + 15 TICs w/SIM	TCL BNA/SVOCs w/SIM	1,4 Dioxane by Isotope Dilution	PCBs	Chloride	Sulfate	Alkalinity	TAL Metals	TAL Metals Dissolved	Total Cyanide	Sample Numbers
PMS-50-082418	8/24/18	0850	GW	15	X	X	X	X	X	X	X	X	X	X	19
PMS-180-082418	8/24/18	0940	GW	15	X	X	X	X	X	X	X	X	X	X	20
PMS-230-082418	8/24/18	1115	GW	15	X	X	X	X	X	X	X	X	X	X	21
PMS-230-082418-MS	8/24/18	1115	GW	15	X	X	X	X	X	X	X	X	X	X	21
PMS-230-082418-MSD	8/24/18	1115	GW	15	X	X	X	X	X	X	X	X	X	X	21
SC-01-082418	8/24/18	1200	GW	15	X	X	X	X	X	X	X	X	X	X	22
FB-03-082418	8/24/18	1230	BW	15	X	X	X	X	X	X	X	X	X	X	23
RW-5-082418	8/24/18	1155	GW	15	X	X	X	X	X	X	X	X	X	X	19
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH				Soil:											
6 = Other _____, 7 = Other _____				Water:	2	1	1	1	1	1	1	4	1	5	

LAB USE ONLY
Project No:
Job No: 163302

Special Instructions

Water Metals Filtered (Yes/No)? No

Relinquished by	Company	Date / Time	Received by	Company
1)	Cornerstone	8/24/18 1510	1) Tim Yap	TA EDISON
Relinquished by 2) Tim Yap	Company TA EDISON	Date / Time 8/24/18 1710	Received by 2)	Company
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 578)

TAL-0016 (0715)

IR # 9

0.8°C 0.9°C 0.4°C 0.6°C 0.8°C
0.5°C 0.7°C 1.0°C 0.9°C 0.7°C

No 25

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 163302

Number of Coolers: 10 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	0.8 °C	0.8 °C	Cooler #4:	0.6 °C	0.6 °C	Cooler #7:	0.7 °C	0.7 °C
Cooler #2:	0.9 °C	0.9 °C	Cooler #5:	0.8 °C	0.8 °C	Cooler #8:	1.0 °C	1.0 °C
Cooler #3:	0.4 °C	0.4 °C	Cooler #6:	0.5 °C	0.5 °C	Cooler #9	0.9 °C	0.9 °C

0.9 °C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1				<2								12			
2				<2								12			
3				<2								12			
4				<2								12			
5				<2								12			
6				<2								12			
7				<2								12			
8				<2								12			
9				<2								12			
10				<2								12			
11				<2								12			
12				<2								12			
13				<2								12			

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: TY Date: 8/24/18

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 163362

Number of Coolers: _____ IR Gun #: _____

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	°C	°C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
14				<2								7-12			
16				<2								7-12			
17				<2								7-12			
18				<2								7-12			
19				<2								7-12			
20				<2								7-12			
21				<2								7-12			
22				<2								7-12			
23				<2								7-12			
24				<2								7-12			

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

* *Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** _____

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 460-163302-1

Login Number: 163302
List Number: 1
Creator: Meyers, Gary

List Source: TestAmerica Edison

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-163415-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Dr. Tim Roeper

Authorized for release by:
9/14/2018 3:58:51 PM

Marie Meidhof, Senior Project Manager
(732)549-3900
marie.meidhof@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
U	Indicates the analyte was analyzed for but not detected.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-163415-1

Laboratory: TestAmerica Edison

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 460-163415-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 8/28/2018 3:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 9 coolers at receipt time were 0.3º C, 0.3º C, 0.5º C, 0.6º C, 0.7º C, 0.8º C, 0.8º C, 0.9º C and 1.1º C.

Receipt Exceptions

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): PMB-02A-082718 (460-163415-34). The client was notified that the sample would be analyzed for the same tests as the other samples received in this delivery group.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): SR3-Seep-02-082718 (460-163415-18). Sample ID on COC is SR3-Seep-01-082718 but SR3-Seep-02-082718 on the container labels. The client was notified that the sample ID is logged in as per the container labels.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples PMB-01-082718 (460-163415-1), Dup-02-082718 (460-163415-2), PMB-01A-082718 (460-163415-3), PMB-02-082718 (460-163415-4), PAB-03-082718 (460-163415-5), PAB-02-082718 (460-163415-6), MRB-02-082718 (460-163415-7), MRB-03-082718 (460-163415-8), NOB-01-082718 (460-163415-9), PAB-00-082718 (460-163415-10), PAB-01-082718 (460-163415-11), SW-11-082718 (460-163415-12), Dup-01-082718 (460-163415-13), PAB-01A-082718 (460-163415-14), PMP-POND-082718 (460-163415-15), SR3-POND-082718 (460-163415-16), SR3-Seep-01-082718 (460-163415-17), SR3-Seep-02-082718 (460-163415-18), SW-3-082718 (460-163415-19), MRB-01-082718 (460-163415-20), MRB-00-082718 (460-163415-21), TB-01-082718 (460-163415-22), RC-03-082718 (460-163415-23), SW-04-082718 (460-163415-24), SW-17-082718 (460-163415-25), SP-00-082718 (460-163415-26), SP-01-082718 (460-163415-27), RC-02-082718 (460-163415-28), RC-01-082718 (460-163415-29), PAB-03A-082718 (460-163415-30), PAB-04-082718 (460-163415-31), NOB-02-082718 (460-163415-32), RM-01-082718 (460-163415-33) and PMB-02A-082718 (460-163415-34) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C DKQP. The samples were analyzed on 08/30/2018, 08/31/2018 and 09/01/2018.

Job ID: 460-163415-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

The continuing calibration verification (CCV) analyzed in batch 460-548531 was outside the method criteria for the following analytes: Bromoform (biased low); Bromomethane and Chloroethane (biased high). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The CCV analyzed in batch 460-548838 was outside the method criteria for the following analytes: Bromomethane, Chloroethane and Methylcyclohexane (biased high) and Bromoform (biased low). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The CCV analyzed in batch 460-549013 was outside the method criteria for the following analytes: Bromoform and Toluene-d8 (Surr). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The laboratory control sample (LCS) for analytical batch 460-548531 recovered outside control limits (low) for the following analyte: Bromoform. This analyte was not detected in the associated samples; therefore, the data have been reported.

The LCS for analytical batch 460-548838 recovered outside control limits (low) for the following analyte: Bromoform. This analyte was not detected in the associated samples; therefore, the data have been reported.

Acetone was detected in method blank MB 460-548531/8 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. 2-Butanone (MEK) was detected in method blank MB 460-548531/8 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Bromoform failed the recovery criteria low for the matrix spike (MS) and matrix spike duplicate (MSD) of sample PMB-01A-082718 (460-163415-3) in batch 460-548531.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

1,4 DIOXANE BY 8270D SIM, ISOTOPE DILUTION

Samples PMB-01-082718 (460-163415-1), Dup-02-082718 (460-163415-2), PMB-01A-082718 (460-163415-3), PMB-02-082718 (460-163415-4), PAB-03-082718 (460-163415-5), PAB-02-082718 (460-163415-6), MRB-02-082718 (460-163415-7), MRB-03-082718 (460-163415-8), NOB-01-082718 (460-163415-9), PAB-00-082718 (460-163415-10), PAB-01-082718 (460-163415-11), SW-11-082718 (460-163415-12), Dup-01-082718 (460-163415-13), PAB-01A-082718 (460-163415-14), PMP-POND-082718 (460-163415-15), SR3-POND-082718 (460-163415-16), SR3-Seep-01-082718 (460-163415-17), SR3-Seep-02-082718 (460-163415-18), SW-3-082718 (460-163415-19), MRB-01-082718 (460-163415-20), MRB-00-082718 (460-163415-21), RC-03-082718 (460-163415-23), SW-04-082718 (460-163415-24), SW-17-082718 (460-163415-25), SP-00-082718 (460-163415-26), SP-01-082718 (460-163415-27), RC-02-082718 (460-163415-28), RC-01-082718 (460-163415-29), PAB-03A-082718 (460-163415-30), PAB-04-082718 (460-163415-31), NOB-02-082718 (460-163415-32), RM-01-082718 (460-163415-33) and PMB-02A-082718 (460-163415-34) were analyzed for 1,4 Dioxane by 8270D SIM, Isotope Dilution in accordance with EPA SW-846 Method 8270D SIM. The samples were prepared on 08/29/2018 and analyzed on 08/29/2018 and 08/30/2018.

No difficulties were encountered during the 1,4 Dioxane analysis.

All quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS) - SELECTED ION MODE (SIM) DKQP

Samples PMB-01-082718 (460-163415-1), Dup-02-082718 (460-163415-2), PMB-01A-082718 (460-163415-3), PMB-02-082718 (460-163415-4), PAB-03-082718 (460-163415-5), PAB-02-082718 (460-163415-6), MRB-02-082718 (460-163415-7), MRB-03-082718 (460-163415-8), NOB-01-082718 (460-163415-9), PAB-00-082718 (460-163415-10), PAB-01-082718 (460-163415-11), SW-11-082718

Job ID: 460-163415-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

(460-163415-12), Dup-01-082718 (460-163415-13), PAB-01A-082718 (460-163415-14), PMP-POND-082718 (460-163415-15), SR3-POND-082718 (460-163415-16), SR3-Seep-01-082718 (460-163415-17), SR3-Seep-02-082718 (460-163415-18), SW-3-082718 (460-163415-19), MRB-01-082718 (460-163415-20), MRB-00-082718 (460-163415-21), TB-01-082718 (460-163415-22), RC-03-082718 (460-163415-23), SW-04-082718 (460-163415-24), SW-17-082718 (460-163415-25), SP-00-082718 (460-163415-26), SP-01-082718 (460-163415-27), RC-02-082718 (460-163415-28), RC-01-082718 (460-163415-29), PAB-03A-082718 (460-163415-30), PAB-04-082718 (460-163415-31), NOB-02-082718 (460-163415-32), RM-01-082718 (460-163415-33) and PMB-02A-082718 (460-163415-34) were analyzed for volatile organic compounds (GC-MS) - Selected Ion Mode (SIM) DKQP in accordance with EPA SW-846 Method 8260C SIM DKQP. The samples were analyzed on 09/02/2018, 09/06/2018, 09/09/2018 and 09/10/2018.

No difficulties were encountered during the VOA SIM DKQP analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICP/MS)

Samples PMB-01-082718 (460-163415-1), Dup-02-082718 (460-163415-2), PMB-01A-082718 (460-163415-3), PMB-02-082718 (460-163415-4), PAB-03-082718 (460-163415-5), PAB-02-082718 (460-163415-6), MRB-02-082718 (460-163415-7), MRB-03-082718 (460-163415-8), NOB-01-082718 (460-163415-9), PAB-00-082718 (460-163415-10), PAB-01-082718 (460-163415-11), SW-11-082718 (460-163415-12), Dup-01-082718 (460-163415-13), PAB-01A-082718 (460-163415-14), PMP-POND-082718 (460-163415-15), SR3-POND-082718 (460-163415-16), SR3-Seep-01-082718 (460-163415-17), SR3-Seep-02-082718 (460-163415-18), SW-3-082718 (460-163415-19), MRB-01-082718 (460-163415-20), MRB-00-082718 (460-163415-21), RC-03-082718 (460-163415-23), SW-04-082718 (460-163415-24), SW-17-082718 (460-163415-25), SP-00-082718 (460-163415-26), SP-01-082718 (460-163415-27), RC-02-082718 (460-163415-28), RC-01-082718 (460-163415-29), PAB-03A-082718 (460-163415-30), PAB-04-082718 (460-163415-31), NOB-02-082718 (460-163415-32), RM-01-082718 (460-163415-33) and PMB-02A-082718 (460-163415-34) were analyzed for Dissolved Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared on 09/05/2018 and analyzed on 09/05/2018 and 09/11/2018.

Sodium failed the recovery criteria high for the MS of sample SP-00-082718 (460-163415-26) in batch 460-551313.

Calcium and Sodium failed the recovery criteria high for the MS of sample PMB-01A-082718 (460-163415-3) in batch 460-549568.

Refer to the QC report for details.

Samples PMB-01-082718 (460-163415-1)[2X], Dup-02-082718 (460-163415-2)[2X], PMB-01A-082718 (460-163415-3)[2X], PMB-02-082718 (460-163415-4)[2X], PAB-03-082718 (460-163415-5)[2X], PAB-02-082718 (460-163415-6)[2X], MRB-02-082718 (460-163415-7)[2X], MRB-03-082718 (460-163415-8)[2X], NOB-01-082718 (460-163415-9)[2X], PAB-00-082718 (460-163415-10)[2X], PAB-01-082718 (460-163415-11)[2X], SW-11-082718 (460-163415-12)[2X], Dup-01-082718 (460-163415-13)[2X], PAB-01A-082718 (460-163415-14)[2X], PMP-POND-082718 (460-163415-15)[2X], SR3-POND-082718 (460-163415-16)[2X], SR3-Seep-01-082718 (460-163415-17)[2X], SR3-Seep-02-082718 (460-163415-18)[2X], SW-3-082718 (460-163415-19)[2X], MRB-01-082718 (460-163415-20)[2X], MRB-00-082718 (460-163415-21)[2X], RC-03-082718 (460-163415-23)[2X], SW-04-082718 (460-163415-24)[2X], SW-17-082718 (460-163415-25)[2X], SP-00-082718 (460-163415-26)[2X], SP-01-082718 (460-163415-27)[2X], RC-02-082718 (460-163415-28)[2X], RC-01-082718 (460-163415-29)[2X], PAB-03A-082718 (460-163415-30)[2X], PAB-04-082718 (460-163415-31)[2X], NOB-02-082718 (460-163415-32)[2X], RM-01-082718 (460-163415-33)[2X] and PMB-02A-082718 (460-163415-34)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Dissolved Metals analysis.

All other quality control parameters were within the acceptance limits.

METALS (ICP/MS)

Samples PMB-01-082718 (460-163415-1), Dup-02-082718 (460-163415-2), PMB-01A-082718 (460-163415-3), PMB-02-082718 (460-163415-4), PAB-03-082718 (460-163415-5), PAB-02-082718 (460-163415-6), MRB-02-082718 (460-163415-7), MRB-03-082718 (460-163415-8), NOB-01-082718 (460-163415-9), PAB-00-082718 (460-163415-10), PAB-01-082718 (460-163415-11), SW-11-082718 (460-163415-12), Dup-01-082718 (460-163415-13), PAB-01A-082718 (460-163415-14), PMP-POND-082718 (460-163415-15), SR3-POND-082718 (460-163415-16), SR3-Seep-01-082718 (460-163415-17), SR3-Seep-02-082718 (460-163415-18), SW-3-082718 (460-163415-19), MRB-01-082718 (460-163415-20), MRB-00-082718 (460-163415-21), RC-03-082718 (460-163415-23), SW-04-082718

Job ID: 460-163415-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

(460-163415-24), SW-17-082718 (460-163415-25), SP-00-082718 (460-163415-26), SP-01-082718 (460-163415-27), RC-02-082718 (460-163415-28), RC-01-082718 (460-163415-29), PAB-03A-082718 (460-163415-30), PAB-04-082718 (460-163415-31), NOB-02-082718 (460-163415-32), RM-01-082718 (460-163415-33) and PMB-02A-082718 (460-163415-34) were analyzed for Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared on 09/05/2018 and analyzed on 09/05/2018, 09/06/2018, 09/12/2018 and 09/13/2018.

Sodium failed the recovery criteria high for the MS of sample PMB-01A-082718 (460-163415-3) in batch 460-551612. Copper exceeded the RPD limit for the duplicate of sample PMB-01A-082718DU (460-163415-3).

Sodium failed the recovery criteria low for the MS of sample 460-163433-2 in batch 460-550229. Several analytes failed the recovery criteria high.

Refer to the QC report for details.

No other difficulties were encountered during the Metals DKQP analysis.

All other quality control parameters were within the acceptance limits.

MERCURY DKQP

Samples PMB-01-082718 (460-163415-1), Dup-02-082718 (460-163415-2), PMB-01A-082718 (460-163415-3), PMB-02-082718 (460-163415-4), PAB-03-082718 (460-163415-5), PAB-02-082718 (460-163415-6), MRB-02-082718 (460-163415-7), MRB-03-082718 (460-163415-8), NOB-01-082718 (460-163415-9), PAB-00-082718 (460-163415-10), PAB-01-082718 (460-163415-11), SW-11-082718 (460-163415-12), Dup-01-082718 (460-163415-13), PAB-01A-082718 (460-163415-14), PMP-POND-082718 (460-163415-15), SR3-POND-082718 (460-163415-16), SR3-Seep-01-082718 (460-163415-17), SR3-Seep-02-082718 (460-163415-18), SW-3-082718 (460-163415-19), MRB-01-082718 (460-163415-20), MRB-00-082718 (460-163415-21), RC-03-082718 (460-163415-23), SW-04-082718 (460-163415-24), SW-17-082718 (460-163415-25), SP-00-082718 (460-163415-26), SP-01-082718 (460-163415-27), RC-02-082718 (460-163415-28), RC-01-082718 (460-163415-29), PAB-03A-082718 (460-163415-30), PAB-04-082718 (460-163415-31), NOB-02-082718 (460-163415-32), RM-01-082718 (460-163415-33) and PMB-02A-082718 (460-163415-34) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 08/31/2018 and 09/04/2018.

No difficulties were encountered during the dissolved Hg analysis.

All quality control parameters were within the acceptance limits.

MERCURY DKQP

Samples PMB-01-082718 (460-163415-1), Dup-02-082718 (460-163415-2), PMB-01A-082718 (460-163415-3), PMB-02-082718 (460-163415-4), PAB-03-082718 (460-163415-5), PAB-02-082718 (460-163415-6), MRB-02-082718 (460-163415-7), MRB-03-082718 (460-163415-8), NOB-01-082718 (460-163415-9), PAB-00-082718 (460-163415-10), PAB-01-082718 (460-163415-11), SW-11-082718 (460-163415-12), Dup-01-082718 (460-163415-13), PAB-01A-082718 (460-163415-14), PMP-POND-082718 (460-163415-15), SR3-POND-082718 (460-163415-16), SR3-Seep-01-082718 (460-163415-17), SR3-Seep-02-082718 (460-163415-18), SW-3-082718 (460-163415-19), MRB-01-082718 (460-163415-20), MRB-00-082718 (460-163415-21), RC-03-082718 (460-163415-23), SW-04-082718 (460-163415-24), SW-17-082718 (460-163415-25), SP-00-082718 (460-163415-26), SP-01-082718 (460-163415-27), RC-02-082718 (460-163415-28), RC-01-082718 (460-163415-29), PAB-03A-082718 (460-163415-30), PAB-04-082718 (460-163415-31), NOB-02-082718 (460-163415-32), RM-01-082718 (460-163415-33) and PMB-02A-082718 (460-163415-34) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 08/31/2018 and 09/04/2018.

No difficulties were encountered during the Hg analysis.

All quality control parameters were within the acceptance limits.

ANIONS

Samples PMB-01-082718 (460-163415-1), Dup-02-082718 (460-163415-2), PMB-01A-082718 (460-163415-3), PMB-02-082718 (460-163415-4), PAB-03-082718 (460-163415-5), PAB-02-082718 (460-163415-6), MRB-02-082718 (460-163415-7), MRB-03-082718 (460-163415-8), NOB-01-082718 (460-163415-9), PAB-00-082718 (460-163415-10), PAB-01-082718 (460-163415-11), SW-11-082718 (460-163415-12), Dup-01-082718 (460-163415-13), PAB-01A-082718 (460-163415-14), PMP-POND-082718 (460-163415-15),

Job ID: 460-163415-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

SR3-POND-082718 (460-163415-16), SR3-Seep-01-082718 (460-163415-17), SR3-Seep-02-082718 (460-163415-18), SW-3-082718 (460-163415-19), MRB-01-082718 (460-163415-20), MRB-00-082718 (460-163415-21), RC-03-082718 (460-163415-23), SW-04-082718 (460-163415-24), SW-17-082718 (460-163415-25), SP-00-082718 (460-163415-26), SP-01-082718 (460-163415-27), RC-02-082718 (460-163415-28), RC-01-082718 (460-163415-29), PAB-03A-082718 (460-163415-30), PAB-04-082718 (460-163415-31), NOB-02-082718 (460-163415-32), RM-01-082718 (460-163415-33) and PMB-02A-082718 (460-163415-34) were analyzed for anions in accordance with EPA SW-846 Method 9056. The samples were analyzed on 08/29/2018, 08/30/2018, 08/31/2018 and 09/01/2018.

Chloride failed the recovery criteria low for the MS and MSD of sample SP-00-082718 (460-163415-26) in batch 460-549036. Sulfate failed the recovery criteria high.

Chloride and Sulfate failed the recovery criteria high for the MS and MSD of sample NOB-02-082718 (460-163415-32) in batch 460-548207.

Refer to the QC report for details.

The following samples were diluted to bring the concentration of Chloride within the calibration range: PMB-01-082718 (460-163415-1), Dup-02-082718 (460-163415-2), PMB-01A-082718 (460-163415-3), PMB-01A-082718 (460-163415-3[MS]), PMB-01A-082718 (460-163415-3[MSD]), PMB-02-082718 (460-163415-4), MRB-03-082718 (460-163415-8), SW-3-082718 (460-163415-19) and (460-163415-E-3 DU). Elevated reporting limits (RLs) are provided.

The following samples were diluted to bring the concentration of target analytes within the calibration range: RC-03-082718 (460-163415-23), SW-04-082718 (460-163415-24), SW-17-082718 (460-163415-25), SP-00-082718 (460-163415-26), SP-00-082718 (460-163415-26[MS]), SP-00-082718 (460-163415-26[MSD]), SP-01-082718 (460-163415-27), RC-02-082718 (460-163415-28), RC-01-082718 (460-163415-29), RM-01-082718 (460-163415-33), PMB-02A-082718 (460-163415-34) and (460-163415-E-26 DU). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the anions analysis.

All other quality control parameters were within the acceptance limits.

ALKALINITY

Samples PMB-01-082718 (460-163415-1), Dup-02-082718 (460-163415-2), PMB-01A-082718 (460-163415-3), PMB-02-082718 (460-163415-4), PAB-03-082718 (460-163415-5), PAB-02-082718 (460-163415-6), MRB-02-082718 (460-163415-7), MRB-03-082718 (460-163415-8), NOB-01-082718 (460-163415-9), PAB-00-082718 (460-163415-10), PAB-01-082718 (460-163415-11), SW-11-082718 (460-163415-12), Dup-01-082718 (460-163415-13), PAB-01A-082718 (460-163415-14), PMP-POND-082718 (460-163415-15), SR3-POND-082718 (460-163415-16), SR3-Seep-01-082718 (460-163415-17), SR3-Seep-02-082718 (460-163415-18), SW-3-082718 (460-163415-19), MRB-01-082718 (460-163415-20), MRB-00-082718 (460-163415-21), RC-03-082718 (460-163415-23), SW-04-082718 (460-163415-24), SW-17-082718 (460-163415-25), SP-00-082718 (460-163415-26), SP-01-082718 (460-163415-27), RC-02-082718 (460-163415-28), RC-01-082718 (460-163415-29), PAB-03A-082718 (460-163415-30), PAB-04-082718 (460-163415-31), NOB-02-082718 (460-163415-32), RM-01-082718 (460-163415-33) and PMB-02A-082718 (460-163415-34) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/29/2018 and 08/30/2018.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

TOTAL CYANIDE

Samples PMB-01-082718 (460-163415-1), Dup-02-082718 (460-163415-2), PMB-01A-082718 (460-163415-3), PMB-02-082718 (460-163415-4), PAB-03-082718 (460-163415-5), PAB-02-082718 (460-163415-6), MRB-02-082718 (460-163415-7), MRB-03-082718 (460-163415-8), NOB-01-082718 (460-163415-9), PAB-00-082718 (460-163415-10), PAB-01-082718 (460-163415-11), SW-11-082718 (460-163415-12), Dup-01-082718 (460-163415-13), PAB-01A-082718 (460-163415-14), PMP-POND-082718 (460-163415-15), SR3-POND-082718 (460-163415-16), SR3-Seep-01-082718 (460-163415-17), SR3-Seep-02-082718 (460-163415-18), SW-3-082718 (460-163415-19), MRB-01-082718 (460-163415-20), MRB-00-082718 (460-163415-21), RC-03-082718 (460-163415-23), SW-04-082718 (460-163415-24), SW-17-082718 (460-163415-25), SP-00-082718 (460-163415-26), SP-01-082718 (460-163415-27), RC-02-082718 (460-163415-28), RC-01-082718 (460-163415-29), PAB-03A-082718 (460-163415-30), PAB-04-082718 (460-163415-31),

Job ID: 460-163415-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

NOB-02-082718 (460-163415-32), RM-01-082718 (460-163415-33) and PMB-02A-082718 (460-163415-34) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B (DKQP). The samples were prepared and analyzed on 08/31/2018, 09/04/2018 and 09/07/2018.

Cyanide, Total failed the recovery criteria low for the MSD of sample SP-01-082718 (460-163415-27) in batch 460-550403. Cyanide, Total exceeded the RPD limit.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the cyanide analysis.

All other quality control parameters were within the acceptance limits.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: PMB-01-082718 — Lab Sample ID: 460-163415-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.3		5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	2.60		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	32.9	D	2.40	1.56	mg/L	20		9056A	Total/NA
Barium	54.2		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	2220		8.0	2.7	ug/L	2		6020B	Total/NA
Aluminum	20.1	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	27800		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	8210		200	65.7	ug/L	2		6020B	Total/NA
Potassium	6370		200	64.9	ug/L	2		6020B	Total/NA
Calcium	37900		200	67.6	ug/L	2		6020B	Total/NA
Iron	10800		120	45.7	ug/L	2		6020B	Total/NA
Barium	45.1		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	2280		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	28900		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	8080		200	65.7	ug/L	2		6020B	Dissolved
Potassium	6800		200	64.9	ug/L	2		6020B	Dissolved
Calcium	39900		200	67.6	ug/L	2		6020B	Dissolved
Iron	60.2	J	120	45.7	ug/L	2		6020B	Dissolved
Cyanide, Total	0.0021	J	0.010	0.0020	mg/L	1		9012B	Total/NA
Bicarbonate Alkalinity as CaCO3	152		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	152		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: Dup-02-082718 — Lab Sample ID: 460-163415-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.5	J B	5.0	1.9	ug/L	1		8260C	Total/NA
Acetone	16	B	5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	2.41		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	34.6	D	2.40	1.56	mg/L	20		9056A	Total/NA
Barium	52.4		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	2230		8.0	2.7	ug/L	2		6020B	Total/NA
Aluminum	23.3	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	27600		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	8240		200	65.7	ug/L	2		6020B	Total/NA
Potassium	6350		200	64.9	ug/L	2		6020B	Total/NA
Calcium	38000		200	67.6	ug/L	2		6020B	Total/NA
Iron	11000		120	45.7	ug/L	2		6020B	Total/NA
Barium	45.0		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	2190		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	27000		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	7790		200	65.7	ug/L	2		6020B	Dissolved
Potassium	6450		200	64.9	ug/L	2		6020B	Dissolved
Calcium	37800		200	67.6	ug/L	2		6020B	Dissolved
Iron	85.8	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	157		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	157		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PMB-01A-082718 — Lab Sample ID: 460-163415-3

This Detection Summary does not include radiochemical test results.

Client Sample ID: PMB-01A-082718 (Continued) — Lab Sample ID: 460-163415-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.2	J B	5.0	1.9	ug/L	1		8260C	Total/NA
Acetone	9.3	B	5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	1.83		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	50.7	D	2.40	1.56	mg/L	20		9056A	Total/NA
Barium	40.1		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.6	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	2000		8.0	2.7	ug/L	2		6020B	Total/NA
Lead	0.44	J	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.85	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	82.5		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	39200		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	8370		200	65.7	ug/L	2		6020B	Total/NA
Potassium	7180		200	64.9	ug/L	2		6020B	Total/NA
Calcium	39500		200	67.6	ug/L	2		6020B	Total/NA
Iron	3120		120	45.7	ug/L	2		6020B	Total/NA
Barium	34.1		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	1780		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	40100		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	8350		200	65.7	ug/L	2		6020B	Dissolved
Potassium	7130		200	64.9	ug/L	2		6020B	Dissolved
Calcium	38900		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	150		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	150		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PMB-02-082718 — Lab Sample ID: 460-163415-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.1	B	5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	5.24		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	54.6	D	2.40	1.56	mg/L	20		9056A	Total/NA
Barium	17.2		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.0	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	279		8.0	2.7	ug/L	2		6020B	Total/NA
Aluminum	24.1	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	41900		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	11300		200	65.7	ug/L	2		6020B	Total/NA
Potassium	5460		200	64.9	ug/L	2		6020B	Total/NA
Calcium	40500		200	67.6	ug/L	2		6020B	Total/NA
Iron	488		120	45.7	ug/L	2		6020B	Total/NA
Barium	16.7		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	190		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	40000		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	10600		200	65.7	ug/L	2		6020B	Dissolved
Potassium	5440		200	64.9	ug/L	2		6020B	Dissolved
Calcium	40600		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	142		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	142		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PAB-03-082718 — Lab Sample ID: 460-163415-5

This Detection Summary does not include radiochemical test results.

Client Sample ID: PAB-03-082718 (Continued) — Lab Sample ID: 460-163415-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.0	B	5.0	5.0	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.44		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	5.60		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	1.24		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	46.4		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	853		8.0	2.7	ug/L	2		6020B	Total/NA
Aluminum	15.5	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	6140		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	3940		200	65.7	ug/L	2		6020B	Total/NA
Potassium	502		200	64.9	ug/L	2		6020B	Total/NA
Calcium	18400		200	67.6	ug/L	2		6020B	Total/NA
Iron	3870		120	45.7	ug/L	2		6020B	Total/NA
Barium	40.1		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	755		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	5390		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3520		200	65.7	ug/L	2		6020B	Dissolved
Potassium	457		200	64.9	ug/L	2		6020B	Dissolved
Calcium	17600		200	67.6	ug/L	2		6020B	Dissolved
Iron	397		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	65.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	65.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PAB-02-082718 — Lab Sample ID: 460-163415-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.3	B	5.0	5.0	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.52		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	5.24		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	2.18		0.60	0.33	mg/L	1		9056A	Total/NA
Arsenic	5.4		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	74.1		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	2.3	J	4.0	1.3	ug/L	2		6020B	Total/NA
Chromium	2.3	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	14.7		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	982		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	4.0		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	5.5		1.2	0.37	ug/L	2		6020B	Total/NA
Vanadium	7.5		4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	23.3		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	1470		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	5670		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	4470		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1280		200	64.9	ug/L	2		6020B	Total/NA
Calcium	19300		200	67.6	ug/L	2		6020B	Total/NA
Iron	8090		120	45.7	ug/L	2		6020B	Total/NA
Barium	37.9		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	8.8		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	5370		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3130		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1080		200	64.9	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: PAB-02-082718 (Continued) — Lab Sample ID: 460-163415-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	15200		200	67.6	ug/L	2		6020B	Dissolved
Iron	495		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	57.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	57.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MRB-02-082718 — Lab Sample ID: 460-163415-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.3	B	5.0	5.0	ug/L	1		8260C	Total/NA
Chloride	2.17		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	3.34		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	11.0		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.1	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	168		8.0	2.7	ug/L	2		6020B	Total/NA
Lead	0.38	J	1.2	0.37	ug/L	2		6020B	Total/NA
Zinc	9.5	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	91.1		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3470		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	1930		200	65.7	ug/L	2		6020B	Total/NA
Potassium	205		200	64.9	ug/L	2		6020B	Total/NA
Calcium	4920		200	67.6	ug/L	2		6020B	Total/NA
Iron	886		120	45.7	ug/L	2		6020B	Total/NA
Barium	8.6		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	60.8		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	2900		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	1710		200	65.7	ug/L	2		6020B	Dissolved
Potassium	174	J	200	64.9	ug/L	2		6020B	Dissolved
Calcium	4510		200	67.6	ug/L	2		6020B	Dissolved
Iron	173		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	17.1		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	17.1		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MRB-03-082718 — Lab Sample ID: 460-163415-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.1	B	5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	3.96		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	13.8	D	0.60	0.39	mg/L	5		9056A	Total/NA
Barium	9.9		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.1	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	87.0		8.0	2.7	ug/L	2		6020B	Total/NA
Aluminum	47.8		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	9810		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2630		200	65.7	ug/L	2		6020B	Total/NA
Potassium	319		200	64.9	ug/L	2		6020B	Total/NA
Calcium	6690		200	67.6	ug/L	2		6020B	Total/NA
Iron	432		120	45.7	ug/L	2		6020B	Total/NA
Barium	8.3		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	19.8		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	9350		200	75.7	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: MRB-03-082718 (Continued) — Lab Sample ID: 460-163415-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	2320		200	65.7	ug/L	2		6020B	Dissolved
Potassium	277		200	64.9	ug/L	2		6020B	Dissolved
Calcium	6240		200	67.6	ug/L	2		6020B	Dissolved
Iron	108	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	21.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	21.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: NOB-01-082718 — Lab Sample ID: 460-163415-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.4	B	5.0	5.0	ug/L	1		8260C	Total/NA
Chloride	1.26		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	5.57		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	65.7		4.0	1.1	ug/L	2		6020B	Total/NA
Beryllium	0.42	J	0.80	0.26	ug/L	2		6020B	Total/NA
Cobalt	1.8	J	4.0	1.3	ug/L	2		6020B	Total/NA
Chromium	3.9	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	7.2		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	866		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	4.8		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	9.5		1.2	0.37	ug/L	2		6020B	Total/NA
Vanadium	6.9		4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	103		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	3020		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	2930		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2690		200	65.7	ug/L	2		6020B	Total/NA
Potassium	939		200	64.9	ug/L	2		6020B	Total/NA
Calcium	7990		200	67.6	ug/L	2		6020B	Total/NA
Iron	3140		120	45.7	ug/L	2		6020B	Total/NA
Barium	14.8		4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	2600		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2030		200	65.7	ug/L	2		6020B	Dissolved
Potassium	704		200	64.9	ug/L	2		6020B	Dissolved
Calcium	6740		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	25.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	25.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PAB-00-082718 — Lab Sample ID: 460-163415-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.3		5.0	5.0	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.41		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	1.81		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	3.03		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	52.3		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	246		8.0	2.7	ug/L	2		6020B	Total/NA
Aluminum	32.9	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3460		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2800		200	65.7	ug/L	2		6020B	Total/NA
Potassium	679		200	64.9	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PAB-00-082718 (Continued) — Lab Sample ID: 460-163415-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	10900		200	67.6	ug/L	2		6020B	Total/NA
Iron	11400		120	45.7	ug/L	2		6020B	Total/NA
Barium	45.9		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	225		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	3070		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2470		200	65.7	ug/L	2		6020B	Dissolved
Potassium	619		200	64.9	ug/L	2		6020B	Dissolved
Calcium	10500		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	41.8		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	41.8		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PAB-01-082718 — Lab Sample ID: 460-163415-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.6	B	5.0	5.0	ug/L	1		8260C	Total/NA
Chloride	1.70		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	4.21		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	7.8		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	23.0		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	0.75	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	161		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3500		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2260		200	65.7	ug/L	2		6020B	Total/NA
Potassium	464		200	64.9	ug/L	2		6020B	Total/NA
Calcium	7240		200	67.6	ug/L	2		6020B	Total/NA
Iron	257		120	45.7	ug/L	2		6020B	Total/NA
Barium	6.9		4.0	1.1	ug/L	2		6020B	Dissolved
Aluminum	22.9	J	40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	3320		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2150		200	65.7	ug/L	2		6020B	Dissolved
Potassium	386		200	64.9	ug/L	2		6020B	Dissolved
Calcium	6970		200	67.6	ug/L	2		6020B	Dissolved
Iron	58.8	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	26.2		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	26.2		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SW-11-082718 — Lab Sample ID: 460-163415-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.1	B	5.0	5.0	ug/L	1		8260C	Total/NA
Chloride	1.69		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	4.48		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	7.5		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	40.3		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.88	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	49.9		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3290		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2220		200	65.7	ug/L	2		6020B	Total/NA
Potassium	402		200	64.9	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SW-11-082718 (Continued) — Lab Sample ID: 460-163415-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	6990		200	67.6	ug/L	2		6020B	Total/NA
Iron	256		120	45.7	ug/L	2		6020B	Total/NA
Barium	6.8		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	24.0		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	3100		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2120		200	65.7	ug/L	2		6020B	Dissolved
Potassium	368		200	64.9	ug/L	2		6020B	Dissolved
Calcium	6780		200	67.6	ug/L	2		6020B	Dissolved
Iron	116	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	25.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	25.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: Dup-01-082718 — Lab Sample ID: 460-163415-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.3	B	5.0	5.0	ug/L	1		8260C	Total/NA
Methylene Chloride	0.35	J	1.0	0.32	ug/L	1		8260C	Total/NA
Chloride	1.68		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	4.49		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	7.5		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	40.3		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.97	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	49.5		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3340		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2250		200	65.7	ug/L	2		6020B	Total/NA
Potassium	416		200	64.9	ug/L	2		6020B	Total/NA
Calcium	7110		200	67.6	ug/L	2		6020B	Total/NA
Iron	261		120	45.7	ug/L	2		6020B	Total/NA
Barium	6.6		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	23.9		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	3060		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2060		200	65.7	ug/L	2		6020B	Dissolved
Potassium	366		200	64.9	ug/L	2		6020B	Dissolved
Calcium	6670		200	67.6	ug/L	2		6020B	Dissolved
Iron	114	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	27.2		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	27.2		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PAB-01A-082718 — Lab Sample ID: 460-163415-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.1	B	5.0	5.0	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.62		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	1.98		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	2.49		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	55.2		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	544		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.98	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	28.1	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3780		200	75.7	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PAB-01A-082718 (Continued) — Lab Sample ID: 460-163415-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	3120		200	65.7	ug/L	2		6020B	Total/NA
Potassium	932		200	64.9	ug/L	2		6020B	Total/NA
Calcium	14200		200	67.6	ug/L	2		6020B	Total/NA
Iron	6650		120	45.7	ug/L	2		6020B	Total/NA
Barium	45.9		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	459		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	3380		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2890		200	65.7	ug/L	2		6020B	Dissolved
Potassium	829		200	64.9	ug/L	2		6020B	Dissolved
Calcium	13100		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	53.5		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	53.5		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PMP-POND-082718 — Lab Sample ID: 460-163415-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.6	B	5.0	5.0	ug/L	1		8260C	Total/NA
Chloride	1.48		0.12	0.078	mg/L	1		9056A	Total/NA
Barium	94.2		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	352		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.93	J	2.0	0.62	ug/L	2		6020B	Total/NA
Sodium	2330		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	3140		200	65.7	ug/L	2		6020B	Total/NA
Potassium	4310		200	64.9	ug/L	2		6020B	Total/NA
Calcium	20000		200	67.6	ug/L	2		6020B	Total/NA
Iron	5720		120	45.7	ug/L	2		6020B	Total/NA
Barium	75.7		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	143		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	2010		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2760		200	65.7	ug/L	2		6020B	Dissolved
Potassium	3760		200	64.9	ug/L	2		6020B	Dissolved
Calcium	17500		200	67.6	ug/L	2		6020B	Dissolved
Iron	90.6	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	67.8		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	67.8		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SR3-POND-082718 — Lab Sample ID: 460-163415-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.4		5.0	5.0	ug/L	1		8260C	Total/NA
1,4-Dioxane	1.4		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	2.18		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	0.63		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	122		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	1180		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.92	J	2.0	0.62	ug/L	2		6020B	Total/NA
Sodium	3560		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	4130		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1920		200	64.9	ug/L	2		6020B	Total/NA
Calcium	25200		200	67.6	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SR3-POND-082718 (Continued) — Lab Sample ID: 460-163415-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	1570		120	45.7	ug/L	2		6020B	Total/NA
Barium	102		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	237		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	3460		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	4050		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1850		200	64.9	ug/L	2		6020B	Dissolved
Calcium	24700		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	90.2		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	90.2		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SR3-Seep-01-082718 — Lab Sample ID: 460-163415-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.0		5.0	5.0	ug/L	1		8260C	Total/NA
Benzene	0.53	J	1.0	0.43	ug/L	1		8260C	Total/NA
Chloroethane	1.9		1.0	0.32	ug/L	1		8260C	Total/NA
1,4-Dioxane	1.5		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	1.83		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	0.99		0.60	0.33	mg/L	1		9056A	Total/NA
Arsenic	1.4	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	198		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	2.2	J	4.0	1.3	ug/L	2		6020B	Total/NA
Manganese	644		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.5	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	1.1	J	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.90	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	3.6	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	5.4	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	68.2		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3730		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	3450		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1610		200	64.9	ug/L	2		6020B	Total/NA
Calcium	21900		200	67.6	ug/L	2		6020B	Total/NA
Iron	45800		120	45.7	ug/L	2		6020B	Total/NA
Barium	147		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	537		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	3340		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3260		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1510		200	64.9	ug/L	2		6020B	Dissolved
Calcium	20400		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	78.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	78.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SR3-Seep-02-082718 — Lab Sample ID: 460-163415-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.5		5.0	5.0	ug/L	1		8260C	Total/NA
Benzene	0.72	J	1.0	0.43	ug/L	1		8260C	Total/NA
Chloroethane	2.9		1.0	0.32	ug/L	1		8260C	Total/NA
1,4-Dioxane	1.6		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SR3-Seep-02-082718 (Continued)

Lab Sample ID: 460-163415-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.85		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	1.04		0.60	0.33	mg/L	1		9056A	Total/NA
Arsenic	1.2	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	186		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	1.9	J	4.0	1.3	ug/L	2		6020B	Total/NA
Manganese	618		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.96	J	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.93	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	2.9	J	4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	63.7		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3870		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	3320		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1580		200	64.9	ug/L	2		6020B	Total/NA
Calcium	21200		200	67.6	ug/L	2		6020B	Total/NA
Iron	36000		120	45.7	ug/L	2		6020B	Total/NA
Barium	142		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	534		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	3210		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3090		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1430		200	64.9	ug/L	2		6020B	Dissolved
Calcium	19500		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	92.0		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	92.0		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SW-3-082718

Lab Sample ID: 460-163415-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.1		5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	3.02		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	37.0	D	2.40	1.56	mg/L	20		9056A	Total/NA
Barium	9.5		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.2	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	147		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.67	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	48.8		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	24500		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	3320		200	65.7	ug/L	2		6020B	Total/NA
Potassium	300		200	64.9	ug/L	2		6020B	Total/NA
Calcium	9310		200	67.6	ug/L	2		6020B	Total/NA
Iron	784		120	45.7	ug/L	2		6020B	Total/NA
Barium	7.4		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	60.2		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	24300		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3260		200	65.7	ug/L	2		6020B	Dissolved
Potassium	267		200	64.9	ug/L	2		6020B	Dissolved
Calcium	8840		200	67.6	ug/L	2		6020B	Dissolved
Iron	189		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	30.5		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	30.5		5.0	5.0	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: MRB-01-082718 — Lab Sample ID: 460-163415-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.0		5.0	5.0	ug/L	1		8260C	Total/NA
Chloride	1.59		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	3.98		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	9.1		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.4	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	33.3		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.85	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	85.4		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3020		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	1610		200	65.7	ug/L	2		6020B	Total/NA
Potassium	454		200	64.9	ug/L	2		6020B	Total/NA
Calcium	4110		200	67.6	ug/L	2		6020B	Total/NA
Iron	341		120	45.7	ug/L	2		6020B	Total/NA
Barium	7.7		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	4.9	J	8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	2640		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	1560		200	65.7	ug/L	2		6020B	Dissolved
Potassium	420		200	64.9	ug/L	2		6020B	Dissolved
Calcium	3920		200	67.6	ug/L	2		6020B	Dissolved
Iron	68.7	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	13.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	13.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MRB-00-082718 — Lab Sample ID: 460-163415-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.6		5.0	5.0	ug/L	1		8260C	Total/NA
Methylene Chloride	0.39	J	1.0	0.32	ug/L	1		8260C	Total/NA
Chloride	1.65		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	4.15		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	9.8		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.9	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	41.0		8.0	2.7	ug/L	2		6020B	Total/NA
Lead	0.47	J	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.80	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	191		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	2930		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	1610		200	65.7	ug/L	2		6020B	Total/NA
Potassium	446		200	64.9	ug/L	2		6020B	Total/NA
Calcium	4070		200	67.6	ug/L	2		6020B	Total/NA
Iron	363		120	45.7	ug/L	2		6020B	Total/NA
Barium	8.1		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	18.6		8.0	2.7	ug/L	2		6020B	Dissolved
Aluminum	16.5	J	40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	2770		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	1680		200	65.7	ug/L	2		6020B	Dissolved
Potassium	438		200	64.9	ug/L	2		6020B	Dissolved
Calcium	4230		200	67.6	ug/L	2		6020B	Dissolved
Iron	65.4	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	14.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MRB-00-082718 (Continued) — Lab Sample ID: 460-163415-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	14.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: TB-01-082718 — Lab Sample ID: 460-163415-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.34	J	1.0	0.32	ug/L	1		8260C	Total/NA

Client Sample ID: RC-03-082718 — Lab Sample ID: 460-163415-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.8		5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	4.65		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	22.2	D	1.20	0.78	mg/L	10		9056A	Total/NA
Barium	9.1		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	69.4		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.86	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	36.9	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	14900		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2660		200	65.7	ug/L	2		6020B	Total/NA
Potassium	698		200	64.9	ug/L	2		6020B	Total/NA
Calcium	8680		200	67.6	ug/L	2		6020B	Total/NA
Iron	461		120	45.7	ug/L	2		6020B	Total/NA
Barium	9.4		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	13.7		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	15700		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2830		200	65.7	ug/L	2		6020B	Dissolved
Potassium	697		200	64.9	ug/L	2		6020B	Dissolved
Calcium	9660		200	67.6	ug/L	2		6020B	Dissolved
Iron	197		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	25.0		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	25.0		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SW-04-082718 — Lab Sample ID: 460-163415-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.0		5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	4.67		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	58.0	D	2.40	1.56	mg/L	20		9056A	Total/NA
Barium	12.3		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.0	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	69.4		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.79	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	35.3	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	42200		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	6090		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1700		200	64.9	ug/L	2		6020B	Total/NA
Calcium	20400		200	67.6	ug/L	2		6020B	Total/NA
Iron	431		120	45.7	ug/L	2		6020B	Total/NA
Barium	12.4		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	25.4		8.0	2.7	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: SW-04-082718 (Continued) — Lab Sample ID: 460-163415-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	44000		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	6270		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1730		200	64.9	ug/L	2		6020B	Dissolved
Calcium	21700		200	67.6	ug/L	2		6020B	Dissolved
Iron	73.0	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	68.1		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	68.1		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SW-17-082718 — Lab Sample ID: 460-163415-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.7		5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	4.53		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	59.4	D	2.40	1.56	mg/L	20		9056A	Total/NA
Barium	13.3		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.4	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	120		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.74	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	51.7		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	40500		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	6120		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1740		200	64.9	ug/L	2		6020B	Total/NA
Calcium	20600		200	67.6	ug/L	2		6020B	Total/NA
Iron	602		120	45.7	ug/L	2		6020B	Total/NA
Barium	12.6		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	45.0		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	43300		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	6480		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1760		200	64.9	ug/L	2		6020B	Dissolved
Calcium	22500		200	67.6	ug/L	2		6020B	Dissolved
Iron	70.6	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	69.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	69.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SP-00-082718 — Lab Sample ID: 460-163415-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11		5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	4.58		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	22.1	D	1.20	0.78	mg/L	10		9056A	Total/NA
Barium	9.5		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	4.4		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	47.5		8.0	2.7	ug/L	2		6020B	Total/NA
Aluminum	54.7		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	14600		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2750		200	65.7	ug/L	2		6020B	Total/NA
Potassium	657		200	64.9	ug/L	2		6020B	Total/NA
Calcium	8770		200	67.6	ug/L	2		6020B	Total/NA
Iron	474		120	45.7	ug/L	2		6020B	Total/NA
Barium	7.9		4.0	1.1	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: SP-00-082718 (Continued) — Lab Sample ID: 460-163415-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	13800		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2500		200	65.7	ug/L	2		6020B	Dissolved
Potassium	618		200	64.9	ug/L	2		6020B	Dissolved
Calcium	8450		200	67.6	ug/L	2		6020B	Dissolved
Iron	161		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	25.2		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	25.2		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SP-01-082718 — Lab Sample ID: 460-163415-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.4		5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	4.62		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	21.7	D	2.40	1.56	mg/L	20		9056A	Total/NA
Barium	10.4		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	105		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.78	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	34.1	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	14900		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2700		200	65.7	ug/L	2		6020B	Total/NA
Potassium	681		200	64.9	ug/L	2		6020B	Total/NA
Calcium	8820		200	67.6	ug/L	2		6020B	Total/NA
Iron	516		120	45.7	ug/L	2		6020B	Total/NA
Barium	9.5		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	25.9		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	15600		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2830		200	65.7	ug/L	2		6020B	Dissolved
Potassium	685		200	64.9	ug/L	2		6020B	Dissolved
Calcium	9600		200	67.6	ug/L	2		6020B	Dissolved
Iron	205		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	25.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	25.3		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RC-02-082718 — Lab Sample ID: 460-163415-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	4.63		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	22.2	D	2.40	1.56	mg/L	20		9056A	Total/NA
Barium	9.0		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	78.8		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.82	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	38.7	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	14900		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2670		200	65.7	ug/L	2		6020B	Total/NA
Potassium	696		200	64.9	ug/L	2		6020B	Total/NA
Calcium	8870		200	67.6	ug/L	2		6020B	Total/NA
Iron	480		120	45.7	ug/L	2		6020B	Total/NA
Barium	9.5		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	13.1		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	15500		200	75.7	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: RC-02-082718 (Continued) — Lab Sample ID: 460-163415-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	2740		200	65.7	ug/L	2		6020B	Dissolved
Potassium	680		200	64.9	ug/L	2		6020B	Dissolved
Calcium	9100		200	67.6	ug/L	2		6020B	Dissolved
Iron	168		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	24.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	24.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RC-01-082718 — Lab Sample ID: 460-163415-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.6		5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	4.58		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	21.8	D	1.20	0.78	mg/L	10		9056A	Total/NA
Barium	8.7		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	58.2		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.78	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	48.6		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	14700		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2530		200	65.7	ug/L	2		6020B	Total/NA
Potassium	584		200	64.9	ug/L	2		6020B	Total/NA
Calcium	8180		200	67.6	ug/L	2		6020B	Total/NA
Iron	416		120	45.7	ug/L	2		6020B	Total/NA
Barium	8.2		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	6.4	J	8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	15300		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2690		200	65.7	ug/L	2		6020B	Dissolved
Potassium	605		200	64.9	ug/L	2		6020B	Dissolved
Calcium	9090		200	67.6	ug/L	2		6020B	Dissolved
Iron	158		120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	22.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	22.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PAB-03A-082718 — Lab Sample ID: 460-163415-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.3		5.0	5.0	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.42		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	5.41		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	1.92		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	21.0		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	70.7		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.88	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	44.0		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	5390		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	3830		200	65.7	ug/L	2		6020B	Total/NA
Potassium	732		200	64.9	ug/L	2		6020B	Total/NA
Calcium	17700		200	67.6	ug/L	2		6020B	Total/NA
Iron	1080		120	45.7	ug/L	2		6020B	Total/NA
Barium	19.9		4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	5620		200	75.7	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: PAB-03A-082718 (Continued) — Lab Sample ID: 460-163415-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	4060		200	65.7	ug/L	2		6020B	Dissolved
Potassium	766		200	64.9	ug/L	2		6020B	Dissolved
Calcium	19100		200	67.6	ug/L	2		6020B	Dissolved
Iron	116	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	61.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	61.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PAB-04-082718 — Lab Sample ID: 460-163415-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.1		5.0	5.0	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.40		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	5.25		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	2.02		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	21.5		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	85.1		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.72	J	2.0	0.62	ug/L	2		6020B	Total/NA
Aluminum	62.7		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	5310		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	3760		200	65.7	ug/L	2		6020B	Total/NA
Potassium	747		200	64.9	ug/L	2		6020B	Total/NA
Calcium	17200		200	67.6	ug/L	2		6020B	Total/NA
Iron	922		120	45.7	ug/L	2		6020B	Total/NA
Barium	19.0		4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	5530		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3970		200	65.7	ug/L	2		6020B	Dissolved
Potassium	769		200	64.9	ug/L	2		6020B	Dissolved
Calcium	18700		200	67.6	ug/L	2		6020B	Dissolved
Iron	92.4	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	59.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	59.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: NOB-02-082718 — Lab Sample ID: 460-163415-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.4		5.0	5.0	ug/L	1		8260C	Total/NA
Chloride	1.65		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	3.95		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	8.1		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	3.9	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	21.7		8.0	2.7	ug/L	2		6020B	Total/NA
Lead	0.46	J	1.2	0.37	ug/L	2		6020B	Total/NA
Vanadium	1.2	J	4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	208		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	2970		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	3540		200	65.7	ug/L	2		6020B	Total/NA
Potassium	678		200	64.9	ug/L	2		6020B	Total/NA
Calcium	7810		200	67.6	ug/L	2		6020B	Total/NA
Iron	324		120	45.7	ug/L	2		6020B	Total/NA
Barium	7.2		4.0	1.1	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: NOB-02-082718 (Continued) — Lab Sample ID: 460-163415-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	19.6	J	40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	2960		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3620		200	65.7	ug/L	2		6020B	Dissolved
Potassium	676		200	64.9	ug/L	2		6020B	Dissolved
Calcium	8490		200	67.6	ug/L	2		6020B	Dissolved
Iron	62.5	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	32.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	32.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RM-01-082718 — Lab Sample ID: 460-163415-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.5		5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	5.03		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	23.3	D	1.20	0.78	mg/L	10		9056A	Total/NA
Barium	8.7		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	4.3		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	47.2		8.0	2.7	ug/L	2		6020B	Total/NA
Lead	1.5		1.2	0.37	ug/L	2		6020B	Total/NA
Aluminum	106		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	16000		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2230		200	65.7	ug/L	2		6020B	Total/NA
Potassium	589		200	64.9	ug/L	2		6020B	Total/NA
Calcium	6890		200	67.6	ug/L	2		6020B	Total/NA
Iron	328		120	45.7	ug/L	2		6020B	Total/NA
Barium	8.6		4.0	1.1	ug/L	2		6020B	Dissolved
Aluminum	19.7	J	40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	16200		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2640		200	65.7	ug/L	2		6020B	Dissolved
Potassium	688		200	64.9	ug/L	2		6020B	Dissolved
Calcium	8480		200	67.6	ug/L	2		6020B	Dissolved
Iron	108	J	120	45.7	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	21.1		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	21.1		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PMB-02A-082718 — Lab Sample ID: 460-163415-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.0		5.0	5.0	ug/L	1		8260C	Total/NA
Sulfate	5.14		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	53.2	D	3.00	1.95	mg/L	25		9056A	Total/NA
Barium	16.7		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	4.0		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	211		8.0	2.7	ug/L	2		6020B	Total/NA
Lead	0.50	J	1.2	0.37	ug/L	2		6020B	Total/NA
Aluminum	38.7	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	39900		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	9890		200	65.7	ug/L	2		6020B	Total/NA
Potassium	4340		200	64.9	ug/L	2		6020B	Total/NA
Calcium	34500		200	67.6	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PMB-02A-082718 (Continued)

Lab Sample ID: 460-163415-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	355		120	45.7	ug/L	2		6020B	Total/NA
Barium	18.9		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	128		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	40700		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	10500		200	65.7	ug/L	2		6020B	Dissolved
Potassium	4680		200	64.9	ug/L	2		6020B	Dissolved
Calcium	38600		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	122		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	122		5.0	5.0	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: PMB-01-082718
Date Collected: 08/27/18 10:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 12:24	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 12:24	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/02/18 12:24*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 11:16	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 11:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 11:16	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 11:16	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 11:16	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 11:16	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 11:16	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 11:16	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 11:16	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 11:16	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 11:16	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 11:16	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 11:16	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 11:16	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 11:16	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 11:16	1
Acetone	**6.3**		5.0	5.0	ug/L			08/31/18 11:16	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 11:16	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 11:16	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 11:16	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 11:16	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 11:16	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 11:16	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 11:16	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 11:16	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 11:16	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 11:16	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 11:16	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 11:16	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 11:16	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 11:16	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 11:16	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 11:16	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 11:16	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 11:16	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 11:16	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 11:16	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 11:16	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 11:16	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 11:16	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 11:16	1

Client Sample ID: PMB-01-082718
Date Collected: 08/27/18 10:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 11:16	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 11:16	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 11:16	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 11:16	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 11:16	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 11:16	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 11:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 11:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*		*08/31/18 11:16*	*1*
4-Bromofluorobenzene	*117*		*70 - 130*		*08/31/18 11:16*	*1*
Dibromofluoromethane (Surr)	*86*		*70 - 130*		*08/31/18 11:16*	*1*
Toluene-d8 (Surr)	*83*		*70 - 130*		*08/31/18 11:16*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/30/18 00:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*08/29/18 09:05*	*08/30/18 00:01*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**2.60**		0.60	0.33	mg/L			08/29/18 17:50	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**32.9**	**D**	2.40	1.56	mg/L			08/30/18 15:59	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 04:12	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:58	09/06/18 04:12	2
Barium	**54.2**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 04:12	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 04:12	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 04:12	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:12	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:12	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 04:12	2
Manganese	**2220**		8.0	2.7	ug/L		09/05/18 08:58	09/06/18 04:12	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:12	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 04:12	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 04:12	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 04:12	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:58	09/06/18 04:12	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 04:12	2
Aluminum	**20.1**	**J**	40.0	15.0	ug/L		09/05/18 08:58	09/06/18 04:12	2
Sodium	**27800**		200	75.7	ug/L		09/05/18 08:58	09/06/18 04:12	2
Magnesium	**8210**		200	65.7	ug/L		09/05/18 08:58	09/06/18 04:12	2

Client Sample ID: PMB-01-082718

Date Collected: 08/27/18 10:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-1
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**6370**		200	64.9	ug/L		09/05/18 08:58	09/06/18 04:12	2
Calcium	**37900**		200	67.6	ug/L		09/05/18 08:58	09/06/18 04:12	2
Iron	**10800**		120	45.7	ug/L		09/05/18 08:58	09/06/18 04:12	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 04:12	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 05:53	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 05:53	2
Barium	**45.1**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 05:53	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 05:53	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 05:53	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 05:53	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 05:53	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 05:53	2
Manganese	**2280**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 05:53	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 05:53	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 05:53	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 05:53	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 05:53	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 05:53	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 05:53	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 05:53	2
Sodium	**28900**		200	75.7	ug/L		09/05/18 01:39	09/05/18 05:53	2
Magnesium	**8080**		200	65.7	ug/L		09/05/18 01:39	09/05/18 05:53	2
Potassium	**6800**		200	64.9	ug/L		09/05/18 01:39	09/05/18 05:53	2
Calcium	**39900**		200	67.6	ug/L		09/05/18 01:39	09/05/18 05:53	2
Iron	**60.2**	**J**	120	45.7	ug/L		09/05/18 01:39	09/05/18 05:53	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 05:53	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 14:46	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 16:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.0021**	**J**	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:28	1
Bicarbonate Alkalinity as CaCO3	**152**		5.0	5.0	mg/L			08/29/18 15:19	1
Alkalinity	**152**		5.0	5.0	mg/L			08/29/18 15:19	1

Client Sample ID: Dup-02-082718

Date Collected: 08/27/18 11:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 12:47	1

Client Sample ID: Dup-02-082718

Date Collected: 08/27/18 11:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 12:47	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*70 - 130*		*09/02/18 12:47*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 09:58	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 09:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 09:58	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 09:58	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 09:58	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 09:58	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 09:58	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 09:58	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 09:58	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 09:58	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 09:58	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 09:58	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 09:58	1
2-Butanone (MEK)	**2.5**	**J B**	5.0	1.9	ug/L			08/30/18 09:58	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 09:58	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 09:58	1
Acetone	**16**	**B**	5.0	5.0	ug/L			08/30/18 09:58	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 09:58	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/30/18 09:58	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 09:58	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 09:58	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 09:58	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 09:58	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 09:58	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 09:58	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 09:58	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 09:58	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 09:58	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 09:58	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 09:58	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 09:58	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 09:58	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 09:58	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 09:58	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 09:58	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 09:58	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 09:58	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 09:58	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/30/18 09:58	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 09:58	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 09:58	1
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 09:58	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: Dup-02-082718
Date Collected: 08/27/18 11:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 09:58	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 09:58	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 09:58	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 09:58	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 09:58	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 09:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/30/18 09:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*08/30/18 09:58*	*1*
4-Bromofluorobenzene	*107*		*70 - 130*		*08/30/18 09:58*	*1*
Dibromofluoromethane (Surr)	*86*		*70 - 130*		*08/30/18 09:58*	*1*
Toluene-d8 (Surr)	*87*		*70 - 130*		*08/30/18 09:58*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/30/18 00:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*34*		*10 - 150*	*08/29/18 09:05*	*08/30/18 00:19*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**2.41**		0.60	0.33	mg/L			08/29/18 18:02	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**34.6**	**D**	2.40	1.56	mg/L			08/30/18 16:13	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 04:23	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:58	09/06/18 04:23	2
Barium	**52.4**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 04:23	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 04:23	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 04:23	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:23	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:23	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 04:23	2
Manganese	**2230**		8.0	2.7	ug/L		09/05/18 08:58	09/06/18 04:23	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:23	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 04:23	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 04:23	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 04:23	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:58	09/06/18 04:23	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 04:23	2
Aluminum	**23.3**	**J**	40.0	15.0	ug/L		09/05/18 08:58	09/06/18 04:23	2
Sodium	**27600**		200	75.7	ug/L		09/05/18 08:58	09/06/18 04:23	2
Magnesium	**8240**		200	65.7	ug/L		09/05/18 08:58	09/06/18 04:23	2
Potassium	**6350**		200	64.9	ug/L		09/05/18 08:58	09/06/18 04:23	2

Client Sample ID: Dup-02-082718

Date Collected: 08/27/18 11:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-2
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**38000**		200	67.6	ug/L		09/05/18 08:58	09/06/18 04:23	2
Iron	**11000**		120	45.7	ug/L		09/05/18 08:58	09/06/18 04:23	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 04:23	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 05:59	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 05:59	2
Barium	**45.0**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 05:59	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 05:59	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 05:59	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 05:59	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 05:59	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 05:59	2
Manganese	**2190**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 05:59	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 05:59	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 05:59	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 05:59	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 05:59	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 05:59	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 05:59	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 05:59	2
Sodium	**27000**		200	75.7	ug/L		09/05/18 01:39	09/05/18 05:59	2
Magnesium	**7790**		200	65.7	ug/L		09/05/18 01:39	09/05/18 05:59	2
Potassium	**6450**		200	64.9	ug/L		09/05/18 01:39	09/05/18 05:59	2
Calcium	**37800**		200	67.6	ug/L		09/05/18 01:39	09/05/18 05:59	2
Iron	**85.8**	**J**	120	45.7	ug/L		09/05/18 01:39	09/05/18 05:59	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 05:59	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 14:51	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 16:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:29	1
Bicarbonate Alkalinity as CaCO3	**157**		5.0	5.0	mg/L			08/29/18 15:27	1
Alkalinity	**157**		5.0	5.0	mg/L			08/29/18 15:27	1

Client Sample ID: PMB-01A-082718

Date Collected: 08/27/18 11:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 12:01	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 12:01	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: PMB-01A-082718
Date Collected: 08/27/18 11:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 12:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/02/18 12:01*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 10:22	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 10:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 10:22	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 10:22	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 10:22	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 10:22	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 10:22	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 10:22	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 10:22	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 10:22	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 10:22	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 10:22	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 10:22	1
2-Butanone (MEK)	**2.2**	**J B**	5.0	1.9	ug/L			08/30/18 10:22	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 10:22	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 10:22	1
Acetone	**9.3**	**B**	5.0	5.0	ug/L			08/30/18 10:22	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 10:22	1
Bromoform	0.54	U F1 *	1.0	0.54	ug/L			08/30/18 10:22	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 10:22	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 10:22	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 10:22	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 10:22	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 10:22	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 10:22	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 10:22	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 10:22	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 10:22	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 10:22	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 10:22	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 10:22	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 10:22	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 10:22	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 10:22	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 10:22	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 10:22	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 10:22	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 10:22	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/30/18 10:22	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 10:22	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 10:22	1
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 10:22	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 10:22	1

Client Sample ID: PMB-01A-082718
Date Collected: 08/27/18 11:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 10:22	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 10:22	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 10:22	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 10:22	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 10:22	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/30/18 10:22*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*08/30/18 10:22*	*1*
4-Bromofluorobenzene	*116*		*70 - 130*		*08/30/18 10:22*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/30/18 10:22*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/30/18 10:22*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/29/18 23:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/29/18 09:05*	*08/29/18 23:08*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**1.83**		0.60	0.33	mg/L			08/29/18 16:54	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50.7**	**D**	2.40	1.56	mg/L			08/30/18 15:06	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 20:41	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 20:41	2
Barium	**40.1**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 20:41	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 20:41	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 20:41	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 20:41	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 20:41	2
Copper	**2.6**	**J**	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 20:41	2
Manganese	**2000**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 20:41	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 20:41	2
Lead	**0.44**	**J**	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 20:41	2
Antimony	**0.85**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 20:41	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 20:41	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 20:41	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 20:41	2
Aluminum	**82.5**		40.0	15.0	ug/L		09/05/18 08:59	09/12/18 20:41	2
Sodium	**39200**		200	75.7	ug/L		09/05/18 08:59	09/12/18 20:41	2
Magnesium	**8370**		200	65.7	ug/L		09/05/18 08:59	09/12/18 20:41	2
Potassium	**7180**		200	64.9	ug/L		09/05/18 08:59	09/12/18 20:41	2
Calcium	**39500**		200	67.6	ug/L		09/05/18 08:59	09/12/18 20:41	2

Client Sample ID: PMB-01A-082718

Lab Sample ID: 460-163415-3

Date Collected: 08/27/18 11:30

Matrix: Water

Date Received: 08/28/18 15:05

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3120**		120	45.7	ug/L		09/05/18 08:59	09/12/18 20:41	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 20:41	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 05:45	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 05:45	2
Barium	**34.1**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 05:45	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 05:45	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 05:45	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 05:45	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 05:45	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 05:45	2
Manganese	**1780**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 05:45	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 05:45	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 05:45	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 05:45	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 05:45	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 05:45	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 05:45	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 05:45	2
Sodium	**40100**		200	75.7	ug/L		09/05/18 01:39	09/05/18 05:45	2
Magnesium	**8350**		200	65.7	ug/L		09/05/18 01:39	09/05/18 05:45	2
Potassium	**7130**		200	64.9	ug/L		09/05/18 01:39	09/05/18 05:45	2
Calcium	**38900**		200	67.6	ug/L		09/05/18 01:39	09/05/18 05:45	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 01:39	09/05/18 05:45	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 05:45	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 14:34	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 16:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:29	1
Bicarbonate Alkalinity as CaCO3	**150**		5.0	5.0	mg/L			08/29/18 14:27	1
Alkalinity	**150**		5.0	5.0	mg/L			08/29/18 14:27	1

Client Sample ID: PMB-02-082718

Lab Sample ID: 460-163415-4

Date Collected: 08/27/18 12:00

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 13:10	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 13:10	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 13:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*94*		*70 - 130*		*09/02/18 13:10*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 11:59	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 11:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 11:59	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 11:59	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 11:59	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 11:59	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 11:59	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 11:59	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 11:59	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 11:59	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 11:59	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 11:59	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 11:59	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/30/18 11:59	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 11:59	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 11:59	1
Acetone	**7.1**	**B**	5.0	5.0	ug/L			08/30/18 11:59	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 11:59	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/30/18 11:59	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 11:59	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 11:59	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 11:59	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 11:59	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 11:59	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 11:59	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 11:59	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 11:59	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 11:59	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 11:59	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 11:59	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 11:59	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 11:59	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 11:59	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 11:59	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 11:59	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 11:59	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 11:59	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 11:59	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/30/18 11:59	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 11:59	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 11:59	1
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 11:59	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 11:59	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 11:59	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 11:59	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 11:59	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 11:59	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 11:59	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	*None*		*ug/L*					*08/30/18 11:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*08/30/18 11:59*	*1*
4-Bromofluorobenzene	*108*		*70 - 130*		*08/30/18 11:59*	*1*
Dibromofluoromethane (Surr)	*87*		*70 - 130*		*08/30/18 11:59*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*08/30/18 11:59*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/30/18 00:37	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/29/18 09:05*	*08/30/18 00:37*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**5.24**		0.60	0.33	mg/L			08/29/18 18:35	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**54.6**	**D**	2.40	1.56	mg/L			08/30/18 16:52	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 04:26	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:58	09/06/18 04:26	2
Barium	**17.2**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 04:26	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 04:26	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 04:26	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:26	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:26	2
Copper	**2.0**	**J**	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 04:26	2
Manganese	**279**		8.0	2.7	ug/L		09/05/18 08:58	09/06/18 04:26	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:26	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 04:26	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 04:26	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 04:26	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:58	09/06/18 04:26	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 04:26	2
Aluminum	**24.1**	**J**	40.0	15.0	ug/L		09/05/18 08:58	09/06/18 04:26	2
Sodium	**41900**		200	75.7	ug/L		09/05/18 08:58	09/06/18 04:26	2
Magnesium	**11300**		200	65.7	ug/L		09/05/18 08:58	09/06/18 04:26	2
Potassium	**5460**		200	64.9	ug/L		09/05/18 08:58	09/06/18 04:26	2
Calcium	**40500**		200	67.6	ug/L		09/05/18 08:58	09/06/18 04:26	2
Iron	**488**		120	45.7	ug/L		09/05/18 08:58	09/06/18 04:26	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 04:26	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:09	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:09	2
Barium	**16.7**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:09	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:09	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:09	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:09	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:09	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:09	2
Manganese	**190**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:09	2

Client Sample ID: PMB-02-082718
Lab Sample ID: 460-163415-4
Date Collected: 08/27/18 12:00
Matrix: Water
Date Received: 08/28/18 15:05

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:09	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:09	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:09	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:09	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:09	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:09	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:09	2
Sodium	**40000**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:09	2
Magnesium	**10600**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:09	2
Potassium	**5440**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:09	2
Calcium	**40600**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:09	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 01:39	09/05/18 06:09	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:09	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 14:53	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 16:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:30	1
Bicarbonate Alkalinity as CaCO3	**142**		5.0	5.0	mg/L			08/29/18 15:35	1
Alkalinity	**142**		5.0	5.0	mg/L			08/29/18 15:35	1

Client Sample ID: PAB-03-082718
Lab Sample ID: 460-163415-5
Date Collected: 08/27/18 11:00
Matrix: Water
Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 13:33	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 13:33	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/02/18 13:33*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 12:23	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 12:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 12:23	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 12:23	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 12:23	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 12:23	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 12:23	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 12:23	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: PAB-03-082718
Date Collected: 08/27/18 11:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 12:23	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 12:23	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 12:23	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 12:23	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 12:23	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/30/18 12:23	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 12:23	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 12:23	1
Acetone	**7.0**	**B**	5.0	5.0	ug/L			08/30/18 12:23	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 12:23	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/30/18 12:23	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 12:23	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 12:23	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 12:23	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 12:23	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 12:23	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 12:23	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 12:23	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 12:23	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 12:23	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 12:23	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 12:23	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 12:23	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 12:23	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 12:23	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 12:23	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 12:23	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 12:23	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 12:23	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 12:23	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/30/18 12:23	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 12:23	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 12:23	1
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 12:23	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 12:23	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 12:23	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 12:23	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 12:23	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 12:23	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 12:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/30/18 12:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*08/30/18 12:23*	*1*
4-Bromofluorobenzene	*107*		*70 - 130*		*08/30/18 12:23*	*1*
Dibromofluoromethane (Surr)	*87*		*70 - 130*		*08/30/18 12:23*	*1*
Toluene-d8 (Surr)	*87*		*70 - 130*		*08/30/18 12:23*	*1*

Client Sample ID: PAB-03-082718

Date Collected: 08/27/18 11:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-5

Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.44**		0.20	0.016	ug/L		08/29/18 09:05	08/30/18 00:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*10 - 150*	*08/29/18 09:05*	*08/30/18 00:55*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.60**		0.12	0.078	mg/L			08/29/18 18:47	1
Sulfate	**1.24**		0.60	0.33	mg/L			08/29/18 18:47	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 04:28	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:58	09/06/18 04:28	2
Barium	**46.4**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 04:28	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 04:28	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 04:28	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:28	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:28	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 04:28	2
Manganese	**853**		8.0	2.7	ug/L		09/05/18 08:58	09/06/18 04:28	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:28	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 04:28	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 04:28	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 04:28	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:58	09/06/18 04:28	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 04:28	2
Aluminum	**15.5**	**J**	40.0	15.0	ug/L		09/05/18 08:58	09/06/18 04:28	2
Sodium	**6140**		200	75.7	ug/L		09/05/18 08:58	09/06/18 04:28	2
Magnesium	**3940**		200	65.7	ug/L		09/05/18 08:58	09/06/18 04:28	2
Potassium	**502**		200	64.9	ug/L		09/05/18 08:58	09/06/18 04:28	2
Calcium	**18400**		200	67.6	ug/L		09/05/18 08:58	09/06/18 04:28	2
Iron	**3870**		120	45.7	ug/L		09/05/18 08:58	09/06/18 04:28	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 04:28	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:12	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:12	2
Barium	**40.1**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:12	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:12	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:12	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:12	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:12	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:12	2
Manganese	**755**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:12	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:12	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:12	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:12	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:12	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:12	2

Client Sample ID: PAB-03-082718

Lab Sample ID: 460-163415-5

Date Collected: 08/27/18 11:00

Matrix: Water

Date Received: 08/28/18 15:05

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:12	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:12	2
Sodium	**5390**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:12	2
Magnesium	**3520**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:12	2
Potassium	**457**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:12	2
Calcium	**17600**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:12	2
Iron	**397**		120	45.7	ug/L		09/05/18 01:39	09/05/18 06:12	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:12	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 14:55	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 16:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:34	1
Bicarbonate Alkalinity as CaCO3	**65.6**		5.0	5.0	mg/L			08/29/18 15:42	1
Alkalinity	**65.6**		5.0	5.0	mg/L			08/29/18 15:42	1

Client Sample ID: PAB-02-082718

Lab Sample ID: 460-163415-6

Date Collected: 08/27/18 11:30

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 13:57	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 13:57	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/02/18 13:57*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 12:47	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 12:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 12:47	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 12:47	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 12:47	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 12:47	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 12:47	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 12:47	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 12:47	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 12:47	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 12:47	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 12:47	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 12:47	1

Client Sample ID: PAB-02-082718
Date Collected: 08/27/18 11:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/30/18 12:47	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 12:47	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 12:47	1
Acetone	**5.3**	**B**	5.0	5.0	ug/L			08/30/18 12:47	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 12:47	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/30/18 12:47	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 12:47	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 12:47	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 12:47	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 12:47	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 12:47	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 12:47	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 12:47	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 12:47	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 12:47	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 12:47	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 12:47	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 12:47	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 12:47	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 12:47	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 12:47	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 12:47	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 12:47	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 12:47	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 12:47	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/30/18 12:47	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 12:47	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 12:47	1
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 12:47	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 12:47	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 12:47	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 12:47	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 12:47	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 12:47	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 12:47	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/30/18 12:47*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*08/30/18 12:47*	*1*
4-Bromofluorobenzene	*108*		*70 - 130*		*08/30/18 12:47*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*		*08/30/18 12:47*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*08/30/18 12:47*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.52**		0.20	0.016	ug/L		08/29/18 09:05	08/30/18 01:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*08/29/18 09:05*	*08/30/18 01:12*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.24**		0.12	0.078	mg/L			08/29/18 18:58	1
Sulfate	**2.18**		0.60	0.33	mg/L			08/29/18 18:58	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 04:31	2
Arsenic	**5.4**		2.0	0.77	ug/L		09/05/18 08:58	09/06/18 04:31	2
Barium	**74.1**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 04:31	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 04:31	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 04:31	2
Cobalt	**2.3**	**J**	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:31	2
Chromium	**2.3**	**J**	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:31	2
Copper	**14.7**		4.0	1.9	ug/L		09/05/18 08:58	09/06/18 04:31	2
Manganese	**982**		8.0	2.7	ug/L		09/05/18 08:58	09/06/18 04:31	2
Nickel	**4.0**		4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:31	2
Lead	**5.5**		1.2	0.37	ug/L		09/05/18 08:58	09/06/18 04:31	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 04:31	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 04:31	2
Vanadium	**7.5**		4.0	1.2	ug/L		09/05/18 08:58	09/06/18 04:31	2
Zinc	**23.3**		16.0	5.4	ug/L		09/05/18 08:58	09/06/18 04:31	2
Aluminum	**1470**		40.0	15.0	ug/L		09/05/18 08:58	09/06/18 04:31	2
Sodium	**5670**		200	75.7	ug/L		09/05/18 08:58	09/06/18 04:31	2
Magnesium	**4470**		200	65.7	ug/L		09/05/18 08:58	09/06/18 04:31	2
Potassium	**1280**		200	64.9	ug/L		09/05/18 08:58	09/06/18 04:31	2
Calcium	**19300**		200	67.6	ug/L		09/05/18 08:58	09/06/18 04:31	2
Iron	**8090**		120	45.7	ug/L		09/05/18 08:58	09/06/18 04:31	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 04:31	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:15	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:15	2
Barium	**37.9**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:15	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:15	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:15	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:15	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:15	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:15	2
Manganese	**8.8**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:15	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:15	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:15	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:15	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:15	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:15	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:15	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:15	2
Sodium	**5370**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:15	2
Magnesium	**3130**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:15	2
Potassium	**1080**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:15	2
Calcium	**15200**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:15	2
Iron	**495**		120	45.7	ug/L		09/05/18 01:39	09/05/18 06:15	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:15	2

Client Sample ID: PAB-02-082718

Lab Sample ID: 460-163415-6
Date Collected: 08/27/18 11:30
Matrix: Water
Date Received: 08/28/18 15:05

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 14:57	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 16:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:35	1
Bicarbonate Alkalinity as CaCO3	**57.3**		5.0	5.0	mg/L			08/29/18 15:50	1
Alkalinity	**57.3**		5.0	5.0	mg/L			08/29/18 15:50	1

Client Sample ID: MRB-02-082718

Lab Sample ID: 460-163415-7
Date Collected: 08/27/18 13:50
Matrix: Water
Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 14:20	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 14:20	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/02/18 14:20*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 13:11	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 13:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 13:11	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 13:11	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 13:11	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 13:11	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 13:11	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 13:11	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 13:11	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 13:11	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 13:11	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 13:11	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 13:11	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/30/18 13:11	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 13:11	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 13:11	1
Acetone	**6.3**	**B**	5.0	5.0	ug/L			08/30/18 13:11	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 13:11	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/30/18 13:11	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 13:11	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 13:11	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 13:11	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 13:11	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 13:11	1

Client Sample ID: MRB-02-082718
Date Collected: 08/27/18 13:50
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 13:11	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 13:11	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 13:11	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 13:11	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 13:11	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 13:11	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 13:11	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 13:11	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 13:11	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 13:11	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 13:11	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 13:11	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 13:11	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 13:11	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/30/18 13:11	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 13:11	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 13:11	1
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 13:11	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 13:11	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 13:11	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 13:11	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 13:11	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 13:11	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 13:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/30/18 13:11*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/30/18 13:11*	*1*
4-Bromofluorobenzene	*121*		*70 - 130*		*08/30/18 13:11*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*08/30/18 13:11*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/30/18 13:11*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/30/18 01:30	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/29/18 09:05*	*08/30/18 01:30*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.17**		0.12	0.078	mg/L			08/29/18 19:09	1
Sulfate	**3.34**		0.60	0.33	mg/L			08/29/18 19:09	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 04:34	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:58	09/06/18 04:34	2
Barium	**11.0**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 04:34	2

Client Sample ID: MRB-02-082718
Date Collected: 08/27/18 13:50
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-7
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 04:34	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 04:34	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:34	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:34	2
Copper	**2.1**	**J**	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 04:34	2
Manganese	**168**		8.0	2.7	ug/L		09/05/18 08:58	09/06/18 04:34	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:34	2
Lead	**0.38**	**J**	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 04:34	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 04:34	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 04:34	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:58	09/06/18 04:34	2
Zinc	**9.5**	**J**	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 04:34	2
Aluminum	**91.1**		40.0	15.0	ug/L		09/05/18 08:58	09/06/18 04:34	2
Sodium	**3470**		200	75.7	ug/L		09/05/18 08:58	09/06/18 04:34	2
Magnesium	**1930**		200	65.7	ug/L		09/05/18 08:58	09/06/18 04:34	2
Potassium	**205**		200	64.9	ug/L		09/05/18 08:58	09/06/18 04:34	2
Calcium	**4920**		200	67.6	ug/L		09/05/18 08:58	09/06/18 04:34	2
Iron	**886**		120	45.7	ug/L		09/05/18 08:58	09/06/18 04:34	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 04:34	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:17	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:17	2
Barium	**8.6**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:17	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:17	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:17	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:17	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:17	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:17	2
Manganese	**60.8**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:17	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:17	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:17	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:17	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:17	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:17	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:17	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:17	2
Sodium	**2900**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:17	2
Magnesium	**1710**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:17	2
Potassium	**174**	**J**	200	64.9	ug/L		09/05/18 01:39	09/05/18 06:17	2
Calcium	**4510**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:17	2
Iron	**173**		120	45.7	ug/L		09/05/18 01:39	09/05/18 06:17	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:17	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 14:58	1

Client Sample ID: MRB-02-082718

Lab Sample ID: 460-163415-7

Date Collected: 08/27/18 13:50

Matrix: Water

Date Received: 08/28/18 15:05

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 16:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:36	1
Bicarbonate Alkalinity as CaCO3	**17.1**		5.0	5.0	mg/L			08/29/18 15:58	1
Alkalinity	**17.1**		5.0	5.0	mg/L			08/29/18 15:58	1

Client Sample ID: MRB-03-082718

Lab Sample ID: 460-163415-8

Date Collected: 08/27/18 14:15

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 14:43	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 14:43	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*09/02/18 14:43*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 13:35	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 13:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 13:35	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 13:35	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 13:35	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 13:35	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 13:35	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 13:35	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 13:35	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 13:35	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 13:35	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 13:35	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 13:35	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/30/18 13:35	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 13:35	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 13:35	1
Acetone	**5.1**	**B**	5.0	5.0	ug/L			08/30/18 13:35	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 13:35	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/30/18 13:35	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 13:35	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 13:35	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 13:35	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 13:35	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 13:35	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 13:35	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 13:35	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 13:35	1

Client Sample ID: MRB-03-082718

Date Collected: 08/27/18 14:15
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 13:35	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 13:35	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 13:35	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 13:35	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 13:35	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 13:35	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 13:35	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 13:35	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 13:35	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 13:35	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 13:35	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/30/18 13:35	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 13:35	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 13:35	1
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 13:35	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 13:35	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 13:35	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 13:35	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 13:35	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 13:35	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 13:35	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/30/18 13:35*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*08/30/18 13:35*	*1*
4-Bromofluorobenzene	*111*		*70 - 130*		*08/30/18 13:35*	*1*
Dibromofluoromethane (Surr)	*86*		*70 - 130*		*08/30/18 13:35*	*1*
Toluene-d8 (Surr)	*87*		*70 - 130*		*08/30/18 13:35*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/30/18 01:48	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*10 - 150*	*08/29/18 09:05*	*08/30/18 01:48*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**3.96**		0.60	0.33	mg/L			08/29/18 19:20	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.8**	**D**	0.60	0.39	mg/L			08/30/18 17:06	5

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 04:36	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:58	09/06/18 04:36	2
Barium	**9.9**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 04:36	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 04:36	2

Client Sample ID: MRB-03-082718
Date Collected: 08/27/18 14:15
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-8
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 04:36	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:36	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:36	2
Copper	**2.1**	**J**	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 04:36	2
Manganese	**87.0**		8.0	2.7	ug/L		09/05/18 08:58	09/06/18 04:36	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:36	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 04:36	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 04:36	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 04:36	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:58	09/06/18 04:36	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 04:36	2
Aluminum	**47.8**		40.0	15.0	ug/L		09/05/18 08:58	09/06/18 04:36	2
Sodium	**9810**		200	75.7	ug/L		09/05/18 08:58	09/06/18 04:36	2
Magnesium	**2630**		200	65.7	ug/L		09/05/18 08:58	09/06/18 04:36	2
Potassium	**319**		200	64.9	ug/L		09/05/18 08:58	09/06/18 04:36	2
Calcium	**6690**		200	67.6	ug/L		09/05/18 08:58	09/06/18 04:36	2
Iron	**432**		120	45.7	ug/L		09/05/18 08:58	09/06/18 04:36	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 04:36	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:20	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:20	2
Barium	**8.3**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:20	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:20	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:20	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:20	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:20	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:20	2
Manganese	**19.8**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:20	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:20	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:20	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:20	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:20	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:20	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:20	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:20	2
Sodium	**9350**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:20	2
Magnesium	**2320**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:20	2
Potassium	**277**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:20	2
Calcium	**6240**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:20	2
Iron	**108**	**J**	120	45.7	ug/L		09/05/18 01:39	09/05/18 06:20	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:20	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 15:00	1

Client Sample ID: MRB-03-082718

Lab Sample ID: 460-163415-8

Date Collected: 08/27/18 14:15

Matrix: Water

Date Received: 08/28/18 15:05

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 16:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:37	1
Bicarbonate Alkalinity as CaCO3	**21.4**		5.0	5.0	mg/L			08/29/18 16:05	1
Alkalinity	**21.4**		5.0	5.0	mg/L			08/29/18 16:05	1

Client Sample ID: NOB-01-082718

Lab Sample ID: 460-163415-9

Date Collected: 08/27/18 08:55

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 15:06	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 15:06	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*70 - 130*		*09/02/18 15:06*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 14:00	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 14:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 14:00	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 14:00	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 14:00	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 14:00	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 14:00	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 14:00	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 14:00	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 14:00	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 14:00	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 14:00	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 14:00	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/30/18 14:00	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 14:00	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 14:00	1
Acetone	**6.4**	**B**	5.0	5.0	ug/L			08/30/18 14:00	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 14:00	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/30/18 14:00	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 14:00	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 14:00	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 14:00	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 14:00	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 14:00	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 14:00	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 14:00	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 14:00	1

Client Sample ID: NOB-01-082718
Date Collected: 08/27/18 08:55
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 14:00	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 14:00	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 14:00	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 14:00	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 14:00	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 14:00	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 14:00	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 14:00	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 14:00	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 14:00	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 14:00	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/30/18 14:00	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 14:00	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 14:00	1
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 14:00	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 14:00	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 14:00	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 14:00	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 14:00	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 14:00	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 14:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/30/18 14:00*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*08/30/18 14:00*	*1*
4-Bromofluorobenzene	*117*		*70 - 130*		*08/30/18 14:00*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*08/30/18 14:00*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/30/18 14:00*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/30/18 02:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/29/18 09:05*	*08/30/18 02:06*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.26**		0.12	0.078	mg/L			08/29/18 19:54	1
Sulfate	**5.57**		0.60	0.33	mg/L			08/29/18 19:54	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 04:42	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:58	09/06/18 04:42	2
Barium	**65.7**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 04:42	2
Beryllium	**0.42**	**J**	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 04:42	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 04:42	2
Cobalt	**1.8**	**J**	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:42	2

Client Sample ID: NOB-01-082718
Date Collected: 08/27/18 08:55
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-9
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**3.9**	**J**	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:42	2
Copper	**7.2**		4.0	1.9	ug/L		09/05/18 08:58	09/06/18 04:42	2
Manganese	**866**		8.0	2.7	ug/L		09/05/18 08:58	09/06/18 04:42	2
Nickel	**4.8**		4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:42	2
Lead	**9.5**		1.2	0.37	ug/L		09/05/18 08:58	09/06/18 04:42	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 04:42	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 04:42	2
Vanadium	**6.9**		4.0	1.2	ug/L		09/05/18 08:58	09/06/18 04:42	2
Zinc	**103**		16.0	5.4	ug/L		09/05/18 08:58	09/06/18 04:42	2
Aluminum	**3020**		40.0	15.0	ug/L		09/05/18 08:58	09/06/18 04:42	2
Sodium	**2930**		200	75.7	ug/L		09/05/18 08:58	09/06/18 04:42	2
Magnesium	**2690**		200	65.7	ug/L		09/05/18 08:58	09/06/18 04:42	2
Potassium	**939**		200	64.9	ug/L		09/05/18 08:58	09/06/18 04:42	2
Calcium	**7990**		200	67.6	ug/L		09/05/18 08:58	09/06/18 04:42	2
Iron	**3140**		120	45.7	ug/L		09/05/18 08:58	09/06/18 04:42	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 04:42	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:23	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:23	2
Barium	**14.8**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:23	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:23	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:23	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:23	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:23	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:23	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:23	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:23	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:23	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:23	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:23	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:23	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:23	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:23	2
Sodium	**2600**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:23	2
Magnesium	**2030**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:23	2
Potassium	**704**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:23	2
Calcium	**6740**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:23	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 01:39	09/05/18 06:23	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:23	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 15:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 16:53	1

Client Sample ID: NOB-01-082718

Lab Sample ID: 460-163415-9

Date Collected: 08/27/18 08:55

Matrix: Water

Date Received: 08/28/18 15:05

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:38	1
Bicarbonate Alkalinity as CaCO3	**25.3**		5.0	5.0	mg/L			08/29/18 16:13	1
Alkalinity	**25.3**		5.0	5.0	mg/L			08/29/18 16:13	1

Client Sample ID: PAB-00-082718

Lab Sample ID: 460-163415-10

Date Collected: 08/27/18 09:10

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 15:30	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 15:30	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*70 - 130*		*09/02/18 15:30*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 01:09	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 01:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 01:09	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 01:09	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 01:09	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 01:09	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 01:09	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 01:09	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 01:09	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 01:09	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 01:09	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 01:09	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 01:09	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 01:09	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 01:09	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 01:09	1
Acetone	**6.3**		5.0	5.0	ug/L			09/01/18 01:09	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 01:09	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 01:09	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 01:09	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/01/18 01:09	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 01:09	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 01:09	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 01:09	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 01:09	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 01:09	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 01:09	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 01:09	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 01:09	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 01:09	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 01:09	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: PAB-00-082718
Date Collected: 08/27/18 09:10
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 01:09	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 01:09	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 01:09	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 01:09	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 01:09	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 01:09	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 01:09	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 01:09	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 01:09	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 01:09	1
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 01:09	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 01:09	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 01:09	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 01:09	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 01:09	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 01:09	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 01:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/18 01:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*09/01/18 01:09*	*1*
4-Bromofluorobenzene	*119*		*70 - 130*		*09/01/18 01:09*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*		*09/01/18 01:09*	*1*
Toluene-d8 (Surr)	*81*		*70 - 130*		*09/01/18 01:09*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.41**		0.20	0.016	ug/L		08/29/18 09:05	08/30/18 02:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*44*		*10 - 150*	*08/29/18 09:05*	*08/30/18 02:24*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.81**		0.12	0.078	mg/L			08/29/18 20:06	1
Sulfate	**3.03**		0.60	0.33	mg/L			08/29/18 20:06	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 04:47	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:58	09/06/18 04:47	2
Barium	**52.3**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 04:47	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 04:47	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 04:47	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:47	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:47	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 04:47	2
Manganese	**246**		8.0	2.7	ug/L		09/05/18 08:58	09/06/18 04:47	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:47	2

Client Sample ID: PAB-00-082718

Date Collected: 08/27/18 09:10
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-10

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 04:47	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 04:47	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 04:47	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:58	09/06/18 04:47	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 04:47	2
Aluminum	**32.9**	**J**	40.0	15.0	ug/L		09/05/18 08:58	09/06/18 04:47	2
Sodium	**3460**		200	75.7	ug/L		09/05/18 08:58	09/06/18 04:47	2
Magnesium	**2800**		200	65.7	ug/L		09/05/18 08:58	09/06/18 04:47	2
Potassium	**679**		200	64.9	ug/L		09/05/18 08:58	09/06/18 04:47	2
Calcium	**10900**		200	67.6	ug/L		09/05/18 08:58	09/06/18 04:47	2
Iron	**11400**		120	45.7	ug/L		09/05/18 08:58	09/06/18 04:47	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 04:47	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:25	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:25	2
Barium	**45.9**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:25	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:25	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:25	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:25	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:25	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:25	2
Manganese	**225**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:25	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:25	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:25	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:25	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:25	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:25	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:25	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:25	2
Sodium	**3070**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:25	2
Magnesium	**2470**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:25	2
Potassium	**619**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:25	2
Calcium	**10500**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:25	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 01:39	09/05/18 06:25	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:25	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 15:03	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 16:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:38	1
Bicarbonate Alkalinity as CaCO3	**41.8**		5.0	5.0	mg/L			08/29/18 16:20	1

Client Sample ID: PAB-00-082718

Date Collected: 08/27/18 09:10
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-10
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**41.8**		5.0	5.0	mg/L			08/29/18 16:20	1

Client Sample ID: PAB-01-082718

Date Collected: 08/27/18 08:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 15:53	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 15:53	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*70 - 130*		*09/02/18 15:53*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 14:48	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 14:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 14:48	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 14:48	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 14:48	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 14:48	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 14:48	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 14:48	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 14:48	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 14:48	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 14:48	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 14:48	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 14:48	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/30/18 14:48	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 14:48	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 14:48	1
Acetone	**5.6**	**B**	5.0	5.0	ug/L			08/30/18 14:48	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 14:48	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/30/18 14:48	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 14:48	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 14:48	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 14:48	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 14:48	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 14:48	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 14:48	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 14:48	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 14:48	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 14:48	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 14:48	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 14:48	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 14:48	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 14:48	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 14:48	1

Client Sample ID: PAB-01-082718
Date Collected: 08/27/18 08:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 14:48	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 14:48	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 14:48	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 14:48	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 14:48	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/30/18 14:48	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 14:48	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 14:48	1
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 14:48	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 14:48	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 14:48	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 14:48	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 14:48	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 14:48	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 14:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/30/18 14:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*08/30/18 14:48*	*1*
4-Bromofluorobenzene	*111*		*70 - 130*		*08/30/18 14:48*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*		*08/30/18 14:48*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*08/30/18 14:48*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/30/18 02:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*10 - 150*	*08/29/18 09:05*	*08/30/18 02:42*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.70**		0.12	0.078	mg/L			08/29/18 20:17	1
Sulfate	**4.21**		0.60	0.33	mg/L			08/29/18 20:17	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 20:52	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 20:52	2
Barium	**7.8**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 20:52	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 20:52	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 20:52	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 20:52	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 20:52	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 20:52	2
Manganese	**23.0**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 20:52	2
Nickel	**1.4**	**J**	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 20:52	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 20:52	2
Antimony	**0.75**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 20:52	2

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: PAB-01-082718
Date Collected: 08/27/18 08:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-11
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 20:52	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 20:52	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 20:52	2
Aluminum	**161**		40.0	15.0	ug/L		09/05/18 08:59	09/12/18 20:52	2
Sodium	**3500**		200	75.7	ug/L		09/05/18 08:59	09/12/18 20:52	2
Magnesium	**2260**		200	65.7	ug/L		09/05/18 08:59	09/12/18 20:52	2
Potassium	**464**		200	64.9	ug/L		09/05/18 08:59	09/12/18 20:52	2
Calcium	**7240**		200	67.6	ug/L		09/05/18 08:59	09/12/18 20:52	2
Iron	**257**		120	45.7	ug/L		09/05/18 08:59	09/12/18 20:52	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 20:52	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:28	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:28	2
Barium	**6.9**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:28	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:28	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:28	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:28	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:28	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:28	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:28	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:28	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:28	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:28	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:28	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:28	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:28	2
Aluminum	**22.9**	**J**	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:28	2
Sodium	**3320**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:28	2
Magnesium	**2150**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:28	2
Potassium	**386**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:28	2
Calcium	**6970**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:28	2
Iron	**58.8**	**J**	120	45.7	ug/L		09/05/18 01:39	09/05/18 06:28	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:28	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 15:05	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 16:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:39	1
Bicarbonate Alkalinity as CaCO3	**26.2**		5.0	5.0	mg/L			08/29/18 16:28	1
Alkalinity	**26.2**		5.0	5.0	mg/L			08/29/18 16:28	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: SW-11-082718
Date Collected: 08/27/18 08:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 16:16	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 16:16	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*70 - 130*		*09/02/18 16:16*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 15:12	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 15:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 15:12	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 15:12	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 15:12	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 15:12	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 15:12	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 15:12	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 15:12	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 15:12	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 15:12	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 15:12	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 15:12	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/30/18 15:12	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 15:12	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 15:12	1
Acetone	**5.1**	**B**	5.0	5.0	ug/L			08/30/18 15:12	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 15:12	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/30/18 15:12	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 15:12	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 15:12	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 15:12	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 15:12	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 15:12	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 15:12	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 15:12	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 15:12	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 15:12	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 15:12	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 15:12	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 15:12	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 15:12	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 15:12	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 15:12	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 15:12	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 15:12	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 15:12	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 15:12	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/30/18 15:12	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 15:12	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 15:12	1

Client Sample ID: SW-11-082718
Date Collected: 08/27/18 08:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 15:12	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 15:12	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 15:12	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 15:12	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 15:12	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 15:12	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 15:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/30/18 15:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*08/30/18 15:12*	*1*
4-Bromofluorobenzene	*113*		*70 - 130*		*08/30/18 15:12*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*08/30/18 15:12*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*08/30/18 15:12*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/30/18 02:59	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*08/29/18 09:05*	*08/30/18 02:59*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.69**		0.12	0.078	mg/L			08/30/18 17:18	1
Sulfate	**4.48**		0.60	0.33	mg/L			08/30/18 17:18	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 21:02	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 21:02	2
Barium	**7.5**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 21:02	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 21:02	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 21:02	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:02	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:02	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 21:02	2
Manganese	**40.3**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 21:02	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:02	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 21:02	2
Antimony	**0.88**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 21:02	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 21:02	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 21:02	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 21:02	2
Aluminum	**49.9**		40.0	15.0	ug/L		09/05/18 08:59	09/12/18 21:02	2
Sodium	**3290**		200	75.7	ug/L		09/05/18 08:59	09/12/18 21:02	2
Magnesium	**2220**		200	65.7	ug/L		09/05/18 08:59	09/12/18 21:02	2
Potassium	**402**		200	64.9	ug/L		09/05/18 08:59	09/12/18 21:02	2
Calcium	**6990**		200	67.6	ug/L		09/05/18 08:59	09/12/18 21:02	2

Client Sample ID: SW-11-082718

Lab Sample ID: 460-163415-12
Matrix: Water
Date Collected: 08/27/18 08:45
Date Received: 08/28/18 15:05

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**256**		120	45.7	ug/L		09/05/18 08:59	09/12/18 21:02	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 21:02	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:33	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:33	2
Barium	**6.8**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:33	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:33	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:33	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:33	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:33	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:33	2
Manganese	**24.0**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:33	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:33	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:33	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:33	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:33	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:33	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:33	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:33	2
Sodium	**3100**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:33	2
Magnesium	**2120**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:33	2
Potassium	**368**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:33	2
Calcium	**6780**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:33	2
Iron	**116**	**J**	120	45.7	ug/L		09/05/18 01:39	09/05/18 06:33	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:33	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 15:07	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 17:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:35	1
Bicarbonate Alkalinity as CaCO3	**25.7**		5.0	5.0	mg/L			08/29/18 16:36	1
Alkalinity	**25.7**		5.0	5.0	mg/L			08/29/18 16:36	1

Client Sample ID: Dup-01-082718

Lab Sample ID: 460-163415-13
Matrix: Water
Date Collected: 08/27/18 12:00
Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 16:39	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 16:39	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	90		70 - 130		09/02/18 16:39	1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 15:37	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 15:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 15:37	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 15:37	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 15:37	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 15:37	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 15:37	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 15:37	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 15:37	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 15:37	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 15:37	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 15:37	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 15:37	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/30/18 15:37	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 15:37	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 15:37	1
Acetone	**5.3**	**B**	5.0	5.0	ug/L			08/30/18 15:37	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 15:37	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/30/18 15:37	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 15:37	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 15:37	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 15:37	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 15:37	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 15:37	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 15:37	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 15:37	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 15:37	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 15:37	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 15:37	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 15:37	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 15:37	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 15:37	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 15:37	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 15:37	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 15:37	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 15:37	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 15:37	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 15:37	1
Methylene Chloride	**0.35**	**J**	1.0	0.32	ug/L			08/30/18 15:37	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 15:37	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 15:37	1
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 15:37	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 15:37	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 15:37	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 15:37	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 15:37	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 15:37	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 15:37	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/30/18 15:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/30/18 15:37*	*1*
4-Bromofluorobenzene	*121*		*70 - 130*		*08/30/18 15:37*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*08/30/18 15:37*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/30/18 15:37*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/30/18 03:17	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	*41*		*10 - 150*	*08/29/18 09:05*	*08/30/18 03:17*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.68**		0.12	0.078	mg/L			08/30/18 17:31	1
Sulfate	**4.49**		0.60	0.33	mg/L			08/30/18 17:31	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 21:05	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 21:05	2
Barium	**7.5**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 21:05	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 21:05	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 21:05	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:05	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:05	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 21:05	2
Manganese	**40.3**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 21:05	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:05	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 21:05	2
Antimony	**0.97**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 21:05	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 21:05	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 21:05	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 21:05	2
Aluminum	**49.5**		40.0	15.0	ug/L		09/05/18 08:59	09/12/18 21:05	2
Sodium	**3340**		200	75.7	ug/L		09/05/18 08:59	09/12/18 21:05	2
Magnesium	**2250**		200	65.7	ug/L		09/05/18 08:59	09/12/18 21:05	2
Potassium	**416**		200	64.9	ug/L		09/05/18 08:59	09/12/18 21:05	2
Calcium	**7110**		200	67.6	ug/L		09/05/18 08:59	09/12/18 21:05	2
Iron	**261**		120	45.7	ug/L		09/05/18 08:59	09/12/18 21:05	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 21:05	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:44	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:44	2
Barium	**6.6**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:44	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:44	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:44	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:44	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:44	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:44	2
Manganese	**23.9**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:44	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:44	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:44	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:44	2

Client Sample ID: Dup-01-082718

Lab Sample ID: 460-163415-13

Date Collected: 08/27/18 12:00

Matrix: Water

Date Received: 08/28/18 15:05

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:44	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:44	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:44	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:44	2
Sodium	**3060**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:44	2
Magnesium	**2060**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:44	2
Potassium	**366**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:44	2
Calcium	**6670**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:44	2
Iron	**114**	**J**	120	45.7	ug/L		09/05/18 01:39	09/05/18 06:44	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:44	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 15:12	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 17:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:36	1
Bicarbonate Alkalinity as CaCO3	**27.2**		5.0	5.0	mg/L			08/29/18 16:43	1
Alkalinity	**27.2**		5.0	5.0	mg/L			08/29/18 16:43	1

Client Sample ID: PAB-01A-082718

Lab Sample ID: 460-163415-14

Date Collected: 08/27/18 09:30

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 17:02	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 17:02	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/02/18 17:02*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 16:00	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 16:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 16:00	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 16:00	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 16:00	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 16:00	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 16:00	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 16:00	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 16:00	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 16:00	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 16:00	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: PAB-01A-082718
Date Collected: 08/27/18 09:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 16:00	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 16:00	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/30/18 16:00	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 16:00	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 16:00	1
Acetone	**6.1**	**B**	5.0	5.0	ug/L			08/30/18 16:00	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 16:00	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/30/18 16:00	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 16:00	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 16:00	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 16:00	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 16:00	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 16:00	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 16:00	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 16:00	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 16:00	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 16:00	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 16:00	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 16:00	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 16:00	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 16:00	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 16:00	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 16:00	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 16:00	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 16:00	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 16:00	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 16:00	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/30/18 16:00	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 16:00	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 16:00	1
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 16:00	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 16:00	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 16:00	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 16:00	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 16:00	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 16:00	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 16:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/30/18 16:00*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*08/30/18 16:00*	*1*
4-Bromofluorobenzene	*111*		*70 - 130*		*08/30/18 16:00*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*		*08/30/18 16:00*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*08/30/18 16:00*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.62**		0.20	0.016	ug/L		08/29/18 09:05	08/30/18 03:35	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: PAB-01A-082718
Date Collected: 08/27/18 09:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-14
Matrix: Water

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	39		10 - 150	08/29/18 09:05	08/30/18 03:35	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.98**		0.12	0.078	mg/L			08/29/18 21:47	1
Sulfate	**2.49**		0.60	0.33	mg/L			08/29/18 21:47	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 21:08	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 21:08	2
Barium	**55.2**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 21:08	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 21:08	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 21:08	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:08	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:08	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 21:08	2
Manganese	**544**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 21:08	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:08	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 21:08	2
Antimony	**0.98**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 21:08	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 21:08	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 21:08	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 21:08	2
Aluminum	**28.1**	**J**	40.0	15.0	ug/L		09/05/18 08:59	09/12/18 21:08	2
Sodium	**3780**		200	75.7	ug/L		09/05/18 08:59	09/12/18 21:08	2
Magnesium	**3120**		200	65.7	ug/L		09/05/18 08:59	09/12/18 21:08	2
Potassium	**932**		200	64.9	ug/L		09/05/18 08:59	09/12/18 21:08	2
Calcium	**14200**		200	67.6	ug/L		09/05/18 08:59	09/12/18 21:08	2
Iron	**6650**		120	45.7	ug/L		09/05/18 08:59	09/12/18 21:08	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 21:08	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:47	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:47	2
Barium	**45.9**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:47	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:47	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:47	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:47	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:47	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:47	2
Manganese	**459**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:47	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:47	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:47	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:47	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:47	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:47	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:47	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:47	2
Sodium	**3380**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:47	2

Client Sample ID: PAB-01A-082718

Lab Sample ID: 460-163415-14
Matrix: Water
Date Collected: 08/27/18 09:30
Date Received: 08/28/18 15:05

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**2890**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:47	2
Potassium	**829**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:47	2
Calcium	**13100**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:47	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 01:39	09/05/18 06:47	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:47	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 15:14	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:37	1
Bicarbonate Alkalinity as CaCO3	**53.5**		5.0	5.0	mg/L			08/29/18 16:51	1
Alkalinity	**53.5**		5.0	5.0	mg/L			08/29/18 16:51	1

Client Sample ID: PMP-POND-082718

Lab Sample ID: 460-163415-15
Matrix: Water
Date Collected: 08/27/18 09:30
Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 17:25	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 17:25	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*70 - 130*		*09/02/18 17:25*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 16:25	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 16:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 16:25	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 16:25	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 16:25	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 16:25	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 16:25	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 16:25	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 16:25	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 16:25	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 16:25	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 16:25	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 16:25	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/30/18 16:25	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 16:25	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 16:25	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: PMP-POND-082718
Date Collected: 08/27/18 09:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	7.6	B	5.0	5.0	ug/L			08/30/18 16:25	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 16:25	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/30/18 16:25	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 16:25	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 16:25	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 16:25	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 16:25	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 16:25	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 16:25	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 16:25	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 16:25	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 16:25	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 16:25	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 16:25	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 16:25	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 16:25	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 16:25	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 16:25	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 16:25	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 16:25	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 16:25	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 16:25	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/30/18 16:25	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 16:25	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 16:25	1
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 16:25	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 16:25	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 16:25	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 16:25	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 16:25	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 16:25	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 16:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/30/18 16:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*08/30/18 16:25*	*1*
4-Bromofluorobenzene	*109*		*70 - 130*		*08/30/18 16:25*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*08/30/18 16:25*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*08/30/18 16:25*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/30/18 03:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*08/29/18 09:05*	*08/30/18 03:53*	*1*

Client Sample ID: PMP-POND-082718

Date Collected: 08/27/18 09:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-15

Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.48**		0.12	0.078	mg/L			08/29/18 21:59	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/29/18 21:59	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 21:11	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 21:11	2
Barium	**94.2**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 21:11	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 21:11	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 21:11	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:11	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:11	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 21:11	2
Manganese	**352**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 21:11	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:11	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 21:11	2
Antimony	**0.93**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 21:11	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 21:11	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 21:11	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 21:11	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 08:59	09/12/18 21:11	2
Sodium	**2330**		200	75.7	ug/L		09/05/18 08:59	09/12/18 21:11	2
Magnesium	**3140**		200	65.7	ug/L		09/05/18 08:59	09/12/18 21:11	2
Potassium	**4310**		200	64.9	ug/L		09/05/18 08:59	09/12/18 21:11	2
Calcium	**20000**		200	67.6	ug/L		09/05/18 08:59	09/12/18 21:11	2
Iron	**5720**		120	45.7	ug/L		09/05/18 08:59	09/12/18 21:11	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 21:11	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:49	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:49	2
Barium	**75.7**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:49	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:49	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:49	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:49	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:49	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:49	2
Manganese	**143**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:49	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:49	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:49	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:49	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:49	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:49	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:49	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:49	2
Sodium	**2010**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:49	2
Magnesium	**2760**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:49	2
Potassium	**3760**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:49	2
Calcium	**17500**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:49	2

Client Sample ID: PMP-POND-082718

Date Collected: 08/27/18 09:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-15
Matrix: Water

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**90.6**	**J**	120	45.7	ug/L		09/05/18 01:39	09/05/18 06:49	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:49	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 15:15	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 17:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:38	1
Bicarbonate Alkalinity as CaCO3	**67.8**		5.0	5.0	mg/L			08/29/18 17:00	1
Alkalinity	**67.8**		5.0	5.0	mg/L			08/29/18 17:00	1

Client Sample ID: SR3-POND-082718

Date Collected: 08/27/18 09:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 17:49	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 17:49	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*70 - 130*		*09/02/18 17:49*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 01:34	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 01:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 01:34	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 01:34	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 01:34	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 01:34	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 01:34	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 01:34	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 01:34	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 01:34	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 01:34	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 01:34	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 01:34	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 01:34	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 01:34	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 01:34	1
Acetone	**7.4**		5.0	5.0	ug/L			09/01/18 01:34	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 01:34	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 01:34	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: SR3-POND-082718
Date Collected: 08/27/18 09:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 01:34	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/01/18 01:34	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 01:34	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 01:34	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 01:34	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 01:34	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 01:34	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 01:34	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 01:34	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 01:34	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 01:34	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 01:34	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 01:34	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 01:34	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 01:34	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 01:34	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 01:34	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 01:34	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 01:34	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 01:34	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 01:34	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 01:34	1
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 01:34	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 01:34	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 01:34	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 01:34	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 01:34	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 01:34	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 01:34	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/18 01:34*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*09/01/18 01:34*	*1*
4-Bromofluorobenzene	*125*		*70 - 130*		*09/01/18 01:34*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*09/01/18 01:34*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*09/01/18 01:34*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.4**		0.20	0.016	ug/L		08/29/18 09:05	08/30/18 04:11	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/29/18 09:05*	*08/30/18 04:11*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.18**		0.12	0.078	mg/L			08/29/18 22:10	1
Sulfate	**0.63**		0.60	0.33	mg/L			08/29/18 22:10	1

Client Sample ID: SR3-POND-082718
Date Collected: 08/27/18 09:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-16
Matrix: Water

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 21:13	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 21:13	2
Barium	**122**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 21:13	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 21:13	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 21:13	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:13	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:13	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 21:13	2
Manganese	**1180**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 21:13	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:13	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 21:13	2
Antimony	**0.92**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 21:13	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 21:13	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 21:13	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 21:13	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 08:59	09/12/18 21:13	2
Sodium	**3560**		200	75.7	ug/L		09/05/18 08:59	09/12/18 21:13	2
Magnesium	**4130**		200	65.7	ug/L		09/05/18 08:59	09/12/18 21:13	2
Potassium	**1920**		200	64.9	ug/L		09/05/18 08:59	09/12/18 21:13	2
Calcium	**25200**		200	67.6	ug/L		09/05/18 08:59	09/12/18 21:13	2
Iron	**1570**		120	45.7	ug/L		09/05/18 08:59	09/12/18 21:13	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 21:13	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:52	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:52	2
Barium	**102**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:52	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:52	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:52	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:52	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:52	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:52	2
Manganese	**237**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:52	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:52	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:52	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:52	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:52	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:52	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:52	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:52	2
Sodium	**3460**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:52	2
Magnesium	**4050**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:52	2
Potassium	**1850**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:52	2
Calcium	**24700**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:52	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 01:39	09/05/18 06:52	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:52	2

Client Sample ID: SR3-POND-082718

Lab Sample ID: 460-163415-16
Date Collected: 08/27/18 09:45
Matrix: Water
Date Received: 08/28/18 15:05

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 15:17	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 17:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:39	1
Bicarbonate Alkalinity as CaCO3	**90.2**		5.0	5.0	mg/L			08/29/18 17:08	1
Alkalinity	**90.2**		5.0	5.0	mg/L			08/29/18 17:08	1

Client Sample ID: SR3-Seep-01-082718

Lab Sample ID: 460-163415-17
Date Collected: 08/27/18 10:00
Matrix: Water
Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 18:12	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 18:12	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*70 - 130*		*09/02/18 18:12*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 01:58	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 01:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 01:58	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 01:58	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 01:58	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 01:58	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 01:58	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 01:58	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 01:58	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 01:58	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 01:58	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 01:58	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 01:58	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 01:58	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 01:58	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 01:58	1
Acetone	**6.0**		5.0	5.0	ug/L			09/01/18 01:58	1
Benzene	**0.53**	**J**	1.0	0.43	ug/L			09/01/18 01:58	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 01:58	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 01:58	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/01/18 01:58	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 01:58	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 01:58	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 01:58	1

Client Sample ID: SR3-Seep-01-082718
Date Collected: 08/27/18 10:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 01:58	1
Chloroethane	**1.9**		1.0	0.32	ug/L			09/01/18 01:58	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 01:58	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 01:58	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 01:58	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 01:58	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 01:58	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 01:58	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 01:58	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 01:58	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 01:58	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 01:58	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 01:58	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 01:58	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 01:58	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 01:58	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 01:58	1
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 01:58	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 01:58	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 01:58	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 01:58	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 01:58	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 01:58	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 01:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/18 01:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*09/01/18 01:58*	*1*
4-Bromofluorobenzene	*122*		*70 - 130*		*09/01/18 01:58*	*1*
Dibromofluoromethane (Surr)	*87*		*70 - 130*		*09/01/18 01:58*	*1*
Toluene-d8 (Surr)	*80*		*70 - 130*		*09/01/18 01:58*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.5**		0.20	0.016	ug/L		08/29/18 09:05	08/30/18 04:29	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/29/18 09:05*	*08/30/18 04:29*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.83**		0.12	0.078	mg/L			08/29/18 22:44	1
Sulfate	**0.99**		0.60	0.33	mg/L			08/29/18 22:44	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 21:19	2
Arsenic	**1.4**	**J**	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 21:19	2
Barium	**198**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 21:19	2

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: SR3-Seep-01-082718
Date Collected: 08/27/18 10:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-17
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 21:19	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 21:19	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:19	2
Chromium	**2.2**	**J**	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:19	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 21:19	2
Manganese	**644**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 21:19	2
Nickel	**1.5**	**J**	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:19	2
Lead	**1.1**	**J**	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 21:19	2
Antimony	**0.90**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 21:19	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 21:19	2
Vanadium	**3.6**	**J**	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 21:19	2
Zinc	**5.4**	**J**	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 21:19	2
Aluminum	**68.2**		40.0	15.0	ug/L		09/05/18 08:59	09/12/18 21:19	2
Sodium	**3730**		200	75.7	ug/L		09/05/18 08:59	09/12/18 21:19	2
Magnesium	**3450**		200	65.7	ug/L		09/05/18 08:59	09/12/18 21:19	2
Potassium	**1610**		200	64.9	ug/L		09/05/18 08:59	09/12/18 21:19	2
Calcium	**21900**		200	67.6	ug/L		09/05/18 08:59	09/12/18 21:19	2
Iron	**45800**		120	45.7	ug/L		09/05/18 08:59	09/12/18 21:19	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 21:19	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:55	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:55	2
Barium	**147**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:55	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:55	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:55	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:55	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:55	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:55	2
Manganese	**537**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:55	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:55	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:55	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:55	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:55	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:55	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:55	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:55	2
Sodium	**3340**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:55	2
Magnesium	**3260**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:55	2
Potassium	**1510**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:55	2
Calcium	**20400**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:55	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 01:39	09/05/18 06:55	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:55	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 15:19	1

Client Sample ID: SR3-Seep-01-082718

Lab Sample ID: 460-163415-17

Date Collected: 08/27/18 10:00

Matrix: Water

Date Received: 08/28/18 15:05

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 17:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:39	1
Bicarbonate Alkalinity as CaCO3	**78.6**		5.0	5.0	mg/L			08/30/18 16:32	1
Alkalinity	**78.6**		5.0	5.0	mg/L			08/30/18 16:32	1

Client Sample ID: SR3-Seep-02-082718

Lab Sample ID: 460-163415-18

Date Collected: 08/27/18 10:15

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 18:35	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 18:35	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*70 - 130*		*09/02/18 18:35*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 02:23	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 02:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 02:23	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 02:23	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 02:23	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 02:23	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 02:23	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 02:23	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 02:23	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 02:23	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 02:23	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 02:23	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 02:23	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 02:23	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 02:23	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 02:23	1
Acetone	**5.5**		5.0	5.0	ug/L			09/01/18 02:23	1
Benzene	**0.72**	**J**	1.0	0.43	ug/L			09/01/18 02:23	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 02:23	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 02:23	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/01/18 02:23	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 02:23	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 02:23	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 02:23	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 02:23	1
Chloroethane	**2.9**		1.0	0.32	ug/L			09/01/18 02:23	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 02:23	1

Client Sample ID: SR3-Seep-02-082718
Date Collected: 08/27/18 10:15
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 02:23	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 02:23	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 02:23	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 02:23	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 02:23	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 02:23	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 02:23	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 02:23	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 02:23	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 02:23	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 02:23	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 02:23	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 02:23	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 02:23	1
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 02:23	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 02:23	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 02:23	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 02:23	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 02:23	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 02:23	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 02:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/18 02:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*09/01/18 02:23*	*1*
4-Bromofluorobenzene	*118*		*70 - 130*		*09/01/18 02:23*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*09/01/18 02:23*	*1*
Toluene-d8 (Surr)	*82*		*70 - 130*		*09/01/18 02:23*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**		0.20	0.016	ug/L		08/29/18 09:05	08/30/18 04:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*10 - 150*	*08/29/18 09:05*	*08/30/18 04:46*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.85**		0.12	0.078	mg/L			08/29/18 22:55	1
Sulfate	**1.04**		0.60	0.33	mg/L			08/29/18 22:55	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 21:38	2
Arsenic	**1.2**	**J**	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 21:38	2
Barium	**186**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 21:38	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 21:38	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 21:38	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:38	2

Client Sample ID: SR3-Seep-02-082718
Date Collected: 08/27/18 10:15
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-18
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**1.9**	**J**	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:38	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 21:38	2
Manganese	**618**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 21:38	2
Nickel	**1.4**	**J**	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:38	2
Lead	**0.96**	**J**	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 21:38	2
Antimony	**0.93**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 21:38	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 21:38	2
Vanadium	**2.9**	**J**	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 21:38	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 21:38	2
Aluminum	**63.7**		40.0	15.0	ug/L		09/05/18 08:59	09/12/18 21:38	2
Sodium	**3870**		200	75.7	ug/L		09/05/18 08:59	09/12/18 21:38	2
Magnesium	**3320**		200	65.7	ug/L		09/05/18 08:59	09/12/18 21:38	2
Potassium	**1580**		200	64.9	ug/L		09/05/18 08:59	09/12/18 21:38	2
Calcium	**21200**		200	67.6	ug/L		09/05/18 08:59	09/12/18 21:38	2
Iron	**36000**		120	45.7	ug/L		09/05/18 08:59	09/12/18 21:38	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 21:38	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 06:57	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 06:57	2
Barium	**142**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 06:57	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 06:57	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 06:57	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:57	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:57	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 06:57	2
Manganese	**534**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 06:57	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 06:57	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 06:57	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 06:57	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 06:57	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 06:57	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 06:57	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 06:57	2
Sodium	**3210**		200	75.7	ug/L		09/05/18 01:39	09/05/18 06:57	2
Magnesium	**3090**		200	65.7	ug/L		09/05/18 01:39	09/05/18 06:57	2
Potassium	**1430**		200	64.9	ug/L		09/05/18 01:39	09/05/18 06:57	2
Calcium	**19500**		200	67.6	ug/L		09/05/18 01:39	09/05/18 06:57	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 01:39	09/05/18 06:57	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 06:57	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:15	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 17:12	1

Client Sample ID: SR3-Seep-02-082718

Lab Sample ID: 460-163415-18

Date Collected: 08/27/18 10:15

Matrix: Water

Date Received: 08/28/18 15:05

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:40	1
Bicarbonate Alkalinity as CaCO3	**92.0**		5.0	5.0	mg/L			08/30/18 16:39	1
Alkalinity	**92.0**		5.0	5.0	mg/L			08/30/18 16:39	1

Client Sample ID: SW-3-082718

Lab Sample ID: 460-163415-19

Date Collected: 08/27/18 14:45

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/06/18 18:31	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/06/18 18:31	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/06/18 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/06/18 18:31*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 11:40	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 11:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 11:40	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 11:40	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 11:40	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 11:40	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 11:40	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 11:40	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 11:40	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 11:40	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 11:40	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 11:40	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 11:40	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 11:40	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 11:40	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 11:40	1
Acetone	**5.1**		5.0	5.0	ug/L			08/31/18 11:40	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 11:40	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 11:40	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 11:40	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 11:40	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 11:40	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 11:40	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 11:40	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 11:40	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 11:40	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 11:40	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 11:40	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 11:40	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 11:40	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 11:40	1

Client Sample ID: SW-3-082718
Date Collected: 08/27/18 14:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-19
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 11:40	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 11:40	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 11:40	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 11:40	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 11:40	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 11:40	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 11:40	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 11:40	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 11:40	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 11:40	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 11:40	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 11:40	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 11:40	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 11:40	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 11:40	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 11:40	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 11:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 11:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*08/31/18 11:40*	*1*
4-Bromofluorobenzene	*117*		*70 - 130*		*08/31/18 11:40*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*08/31/18 11:40*	*1*
Toluene-d8 (Surr)	*83*		*70 - 130*		*08/31/18 11:40*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/30/18 05:04	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*10 - 150*	*08/29/18 09:05*	*08/30/18 05:04*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**3.02**		0.60	0.33	mg/L			08/29/18 23:07	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.0**	**D**	2.40	1.56	mg/L			08/30/18 17:45	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 21:46	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 21:46	2
Barium	**9.5**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 21:46	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 21:46	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 21:46	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:46	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:46	2
Copper	**2.2**	**J**	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 21:46	2

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: SW-3-082718
Date Collected: 08/27/18 14:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-19
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**147**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 21:46	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:46	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 21:46	2
Antimony	**0.67**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 21:46	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 21:46	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 21:46	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 21:46	2
Aluminum	**48.8**		40.0	15.0	ug/L		09/05/18 08:59	09/12/18 21:46	2
Sodium	**24500**		200	75.7	ug/L		09/05/18 08:59	09/12/18 21:46	2
Magnesium	**3320**		200	65.7	ug/L		09/05/18 08:59	09/12/18 21:46	2
Potassium	**300**		200	64.9	ug/L		09/05/18 08:59	09/12/18 21:46	2
Calcium	**9310**		200	67.6	ug/L		09/05/18 08:59	09/12/18 21:46	2
Iron	**784**		120	45.7	ug/L		09/05/18 08:59	09/12/18 21:46	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 21:46	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 07:03	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 07:03	2
Barium	**7.4**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 07:03	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 07:03	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 07:03	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 07:03	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 07:03	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 07:03	2
Manganese	**60.2**		8.0	2.7	ug/L		09/05/18 01:39	09/05/18 07:03	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 07:03	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 07:03	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 07:03	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 07:03	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 07:03	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 07:03	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 07:03	2
Sodium	**24300**		200	75.7	ug/L		09/05/18 01:39	09/05/18 07:03	2
Magnesium	**3260**		200	65.7	ug/L		09/05/18 01:39	09/05/18 07:03	2
Potassium	**267**		200	64.9	ug/L		09/05/18 01:39	09/05/18 07:03	2
Calcium	**8840**		200	67.6	ug/L		09/05/18 01:39	09/05/18 07:03	2
Iron	**189**		120	45.7	ug/L		09/05/18 01:39	09/05/18 07:03	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 07:03	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:17	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 17:14	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: SW-3-082718

Lab Sample ID: 460-163415-19

Date Collected: 08/27/18 14:45

Matrix: Water

Date Received: 08/28/18 15:05

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:41	1
Bicarbonate Alkalinity as CaCO3	**30.5**		5.0	5.0	mg/L			08/30/18 16:46	1
Alkalinity	**30.5**		5.0	5.0	mg/L			08/30/18 16:46	1

Client Sample ID: MRB-01-082718

Lab Sample ID: 460-163415-20

Date Collected: 08/27/18 13:25

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/10/18 00:55	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/10/18 00:55	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/10/18 00:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*09/10/18 00:55*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 12:04	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 12:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 12:04	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 12:04	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 12:04	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 12:04	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 12:04	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 12:04	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 12:04	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 12:04	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 12:04	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 12:04	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 12:04	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 12:04	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 12:04	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 12:04	1
Acetone	**6.0**		5.0	5.0	ug/L			08/31/18 12:04	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 12:04	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 12:04	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 12:04	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 12:04	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 12:04	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 12:04	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 12:04	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 12:04	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 12:04	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 12:04	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 12:04	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 12:04	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 12:04	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 12:04	1

Client Sample ID: MRB-01-082718
Date Collected: 08/27/18 13:25
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-20
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 12:04	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 12:04	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 12:04	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 12:04	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 12:04	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 12:04	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 12:04	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 12:04	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 12:04	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 12:04	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 12:04	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 12:04	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 12:04	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 12:04	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 12:04	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 12:04	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 12:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 12:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*08/31/18 12:04*	*1*
4-Bromofluorobenzene	*118*		*70 - 130*		*08/31/18 12:04*	*1*
Dibromofluoromethane (Surr)	*91*		*70 - 130*		*08/31/18 12:04*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*08/31/18 12:04*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/30/18 05:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*08/29/18 09:05*	*08/30/18 05:22*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.59**		0.12	0.078	mg/L			08/29/18 23:18	1
Sulfate	**3.98**		0.60	0.33	mg/L			08/29/18 23:18	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 21:48	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 21:48	2
Barium	**9.1**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 21:48	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 21:48	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 21:48	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:48	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:48	2
Copper	**2.4**	**J**	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 21:48	2
Manganese	**33.3**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 21:48	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:48	2

Client Sample ID: MRB-01-082718
Date Collected: 08/27/18 13:25
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-20
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 21:48	2
Antimony	**0.85**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 21:48	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 21:48	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 21:48	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 21:48	2
Aluminum	**85.4**		40.0	15.0	ug/L		09/05/18 08:59	09/12/18 21:48	2
Sodium	**3020**		200	75.7	ug/L		09/05/18 08:59	09/12/18 21:48	2
Magnesium	**1610**		200	65.7	ug/L		09/05/18 08:59	09/12/18 21:48	2
Potassium	**454**		200	64.9	ug/L		09/05/18 08:59	09/12/18 21:48	2
Calcium	**4110**		200	67.6	ug/L		09/05/18 08:59	09/12/18 21:48	2
Iron	**341**		120	45.7	ug/L		09/05/18 08:59	09/12/18 21:48	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 21:48	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 01:39	09/05/18 07:08	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 01:39	09/05/18 07:08	2
Barium	**7.7**		4.0	1.1	ug/L		09/05/18 01:39	09/05/18 07:08	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 01:39	09/05/18 07:08	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 01:39	09/05/18 07:08	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 07:08	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 07:08	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 01:39	09/05/18 07:08	2
Manganese	**4.9**	**J**	8.0	2.7	ug/L		09/05/18 01:39	09/05/18 07:08	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 07:08	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 01:39	09/05/18 07:08	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 01:39	09/05/18 07:08	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 01:39	09/05/18 07:08	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 01:39	09/05/18 07:08	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 01:39	09/05/18 07:08	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 01:39	09/05/18 07:08	2
Sodium	**2640**		200	75.7	ug/L		09/05/18 01:39	09/05/18 07:08	2
Magnesium	**1560**		200	65.7	ug/L		09/05/18 01:39	09/05/18 07:08	2
Potassium	**420**		200	64.9	ug/L		09/05/18 01:39	09/05/18 07:08	2
Calcium	**3920**		200	67.6	ug/L		09/05/18 01:39	09/05/18 07:08	2
Iron	**68.7**	**J**	120	45.7	ug/L		09/05/18 01:39	09/05/18 07:08	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 01:39	09/05/18 07:08	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:19	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 17:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:46	1
Bicarbonate Alkalinity as CaCO3	**13.6**		5.0	5.0	mg/L			08/30/18 16:54	1

Client Sample ID: MRB-01-082718

Lab Sample ID: 460-163415-20

Date Collected: 08/27/18 13:25

Matrix: Water

Date Received: 08/28/18 15:05

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**13.6**		5.0	5.0	mg/L			08/30/18 16:54	1

Client Sample ID: MRB-00-082718

Lab Sample ID: 460-163415-21

Date Collected: 08/27/18 13:00

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/06/18 19:17	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/06/18 19:17	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/06/18 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/06/18 19:17*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 08:51	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 08:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 08:51	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 08:51	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 08:51	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 08:51	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 08:51	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 08:51	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 08:51	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 08:51	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 08:51	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 08:51	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 08:51	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 08:51	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 08:51	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 08:51	1
Acetone	**6.6**		5.0	5.0	ug/L			08/31/18 08:51	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 08:51	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 08:51	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 08:51	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 08:51	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 08:51	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 08:51	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 08:51	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 08:51	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 08:51	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 08:51	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 08:51	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 08:51	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 08:51	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 08:51	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 08:51	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 08:51	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: MRB-00-082718
Date Collected: 08/27/18 13:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-21
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 08:51	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 08:51	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 08:51	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 08:51	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 08:51	1
Methylene Chloride	**0.39**	**J**	1.0	0.32	ug/L			08/31/18 08:51	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 08:51	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 08:51	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 08:51	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 08:51	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 08:51	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 08:51	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 08:51	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 08:51	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 08:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 08:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*08/31/18 08:51*	*1*
4-Bromofluorobenzene	*116*		*70 - 130*		*08/31/18 08:51*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*08/31/18 08:51*	*1*
Toluene-d8 (Surr)	*83*		*70 - 130*		*08/31/18 08:51*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:12	08/30/18 07:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*10 - 150*	*08/29/18 09:12*	*08/30/18 07:09*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.65**		0.12	0.078	mg/L			08/30/18 15:40	1
Sulfate	**4.15**		0.60	0.33	mg/L			08/30/18 15:40	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 21:51	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 21:51	2
Barium	**9.8**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 21:51	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 21:51	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 21:51	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:51	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:51	2
Copper	**2.9**	**J**	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 21:51	2
Manganese	**41.0**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 21:51	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:51	2
Lead	**0.47**	**J**	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 21:51	2
Antimony	**0.80**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 21:51	2

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: MRB-00-082718
Date Collected: 08/27/18 13:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-21
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 21:51	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 21:51	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 21:51	2
Aluminum	**191**		40.0	15.0	ug/L		09/05/18 08:59	09/12/18 21:51	2
Sodium	**2930**		200	75.7	ug/L		09/05/18 08:59	09/12/18 21:51	2
Magnesium	**1610**		200	65.7	ug/L		09/05/18 08:59	09/12/18 21:51	2
Potassium	**446**		200	64.9	ug/L		09/05/18 08:59	09/12/18 21:51	2
Calcium	**4070**		200	67.6	ug/L		09/05/18 08:59	09/12/18 21:51	2
Iron	**363**		120	45.7	ug/L		09/05/18 08:59	09/12/18 21:51	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 21:51	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 02:47	09/11/18 15:33	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 02:47	09/11/18 15:33	2
Barium	**8.1**		4.0	1.1	ug/L		09/05/18 02:47	09/11/18 15:33	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 02:47	09/11/18 15:33	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 02:47	09/11/18 15:33	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 15:33	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 15:33	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 02:47	09/11/18 15:33	2
Manganese	**18.6**		8.0	2.7	ug/L		09/05/18 02:47	09/11/18 15:33	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 15:33	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 02:47	09/11/18 15:33	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 02:47	09/11/18 15:33	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 02:47	09/11/18 15:33	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 02:47	09/11/18 15:33	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 02:47	09/11/18 15:33	2
Aluminum	**16.5**	**J**	40.0	15.0	ug/L		09/05/18 02:47	09/11/18 15:33	2
Sodium	**2770**		200	75.7	ug/L		09/05/18 02:47	09/11/18 15:33	2
Magnesium	**1680**		200	65.7	ug/L		09/05/18 02:47	09/11/18 15:33	2
Potassium	**438**		200	64.9	ug/L		09/05/18 02:47	09/11/18 15:33	2
Calcium	**4230**		200	67.6	ug/L		09/05/18 02:47	09/11/18 15:33	2
Iron	**65.4**	**J**	120	45.7	ug/L		09/05/18 02:47	09/11/18 15:33	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 02:47	09/11/18 15:33	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:20	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 10:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:46	1
Bicarbonate Alkalinity as CaCO3	**14.3**		5.0	5.0	mg/L			08/30/18 17:01	1
Alkalinity	**14.3**		5.0	5.0	mg/L			08/30/18 17:01	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: TB-01-082718
Date Collected: 08/27/18 00:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-22
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/06/18 19:41	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/06/18 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/06/18 19:41*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 08:27	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 08:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 08:27	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 08:27	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 08:27	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 08:27	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 08:27	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 08:27	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 08:27	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 08:27	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 08:27	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 08:27	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 08:27	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 08:27	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 08:27	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 08:27	1
Acetone	5.0	U	5.0	5.0	ug/L			08/31/18 08:27	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 08:27	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 08:27	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 08:27	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 08:27	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 08:27	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 08:27	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 08:27	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 08:27	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 08:27	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 08:27	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 08:27	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 08:27	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 08:27	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 08:27	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 08:27	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 08:27	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 08:27	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 08:27	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 08:27	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 08:27	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 08:27	1
Methylene Chloride	**0.34**	**J**	1.0	0.32	ug/L			08/31/18 08:27	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 08:27	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 08:27	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 08:27	1

Client Sample ID: TB-01-082718
Lab Sample ID: 460-163415-22
Date Collected: 08/27/18 00:00
Matrix: Water
Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 08:27	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 08:27	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 08:27	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 08:27	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 08:27	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 08:27	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 08:27*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*08/31/18 08:27*	*1*
4-Bromofluorobenzene	*117*		*70 - 130*		*08/31/18 08:27*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*		*08/31/18 08:27*	*1*
Toluene-d8 (Surr)	*84*		*70 - 130*		*08/31/18 08:27*	*1*

Client Sample ID: RC-03-082718
Lab Sample ID: 460-163415-23
Date Collected: 08/27/18 15:30
Matrix: Water
Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/06/18 20:04	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/06/18 20:04	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/06/18 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*09/06/18 20:04*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 12:28	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 12:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 12:28	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 12:28	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 12:28	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 12:28	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 12:28	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 12:28	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 12:28	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 12:28	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 12:28	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 12:28	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 12:28	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 12:28	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 12:28	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 12:28	1
Acetone	**5.8**		5.0	5.0	ug/L			08/31/18 12:28	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 12:28	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 12:28	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 12:28	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: RC-03-082718
Date Collected: 08/27/18 15:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-23
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 12:28	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 12:28	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 12:28	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 12:28	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 12:28	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 12:28	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 12:28	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 12:28	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 12:28	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 12:28	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 12:28	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 12:28	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 12:28	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 12:28	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 12:28	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 12:28	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 12:28	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 12:28	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 12:28	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 12:28	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 12:28	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 12:28	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 12:28	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 12:28	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 12:28	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 12:28	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 12:28	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 12:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 12:28*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*08/31/18 12:28*	*1*
4-Bromofluorobenzene	*120*		*70 - 130*		*08/31/18 12:28*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*08/31/18 12:28*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*08/31/18 12:28*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:12	08/30/18 07:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*31*		*10 - 150*	*08/29/18 09:12*	*08/30/18 07:27*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**4.65**		0.60	0.33	mg/L			08/30/18 15:51	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: RC-03-082718
Date Collected: 08/27/18 15:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-23
Matrix: Water

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**22.2**	**D**	1.20	0.78	mg/L			08/31/18 21:56	10

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 21:54	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 21:54	2
Barium	**9.1**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 21:54	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 21:54	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 21:54	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:54	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:54	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 21:54	2
Manganese	**69.4**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 21:54	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:54	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 21:54	2
Antimony	**0.86**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 21:54	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 21:54	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 21:54	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 21:54	2
Aluminum	**36.9**	**J**	40.0	15.0	ug/L		09/05/18 08:59	09/12/18 21:54	2
Sodium	**14900**		200	75.7	ug/L		09/05/18 08:59	09/12/18 21:54	2
Magnesium	**2660**		200	65.7	ug/L		09/05/18 08:59	09/12/18 21:54	2
Potassium	**698**		200	64.9	ug/L		09/05/18 08:59	09/12/18 21:54	2
Calcium	**8680**		200	67.6	ug/L		09/05/18 08:59	09/12/18 21:54	2
Iron	**461**		120	45.7	ug/L		09/05/18 08:59	09/12/18 21:54	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 21:54	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 02:47	09/11/18 15:38	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 02:47	09/11/18 15:38	2
Barium	**9.4**		4.0	1.1	ug/L		09/05/18 02:47	09/11/18 15:38	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 02:47	09/11/18 15:38	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 02:47	09/11/18 15:38	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 15:38	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 15:38	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 02:47	09/11/18 15:38	2
Manganese	**13.7**		8.0	2.7	ug/L		09/05/18 02:47	09/11/18 15:38	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 15:38	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 02:47	09/11/18 15:38	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 02:47	09/11/18 15:38	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 02:47	09/11/18 15:38	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 02:47	09/11/18 15:38	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 02:47	09/11/18 15:38	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 02:47	09/11/18 15:38	2
Sodium	**15700**		200	75.7	ug/L		09/05/18 02:47	09/11/18 15:38	2
Magnesium	**2830**		200	65.7	ug/L		09/05/18 02:47	09/11/18 15:38	2
Potassium	**697**		200	64.9	ug/L		09/05/18 02:47	09/11/18 15:38	2
Calcium	**9660**		200	67.6	ug/L		09/05/18 02:47	09/11/18 15:38	2
Iron	**197**		120	45.7	ug/L		09/05/18 02:47	09/11/18 15:38	2

Client Sample ID: RC-03-082718

Lab Sample ID: 460-163415-23

Date Collected: 08/27/18 15:30

Matrix: Water

Date Received: 08/28/18 15:05

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 02:47	09/11/18 15:38	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:26	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 10:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:47	1
Bicarbonate Alkalinity as CaCO3	**25.0**		5.0	5.0	mg/L			08/30/18 17:09	1
Alkalinity	**25.0**		5.0	5.0	mg/L			08/30/18 17:09	1

Client Sample ID: SW-04-082718

Lab Sample ID: 460-163415-24

Date Collected: 08/27/18 15:45

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/09/18 23:22	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/09/18 23:22	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/09/18 23:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 130*		*09/09/18 23:22*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 12:53	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 12:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 12:53	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 12:53	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 12:53	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 12:53	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 12:53	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 12:53	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 12:53	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 12:53	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 12:53	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 12:53	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 12:53	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 12:53	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 12:53	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 12:53	1
Acetone	**5.0**		5.0	5.0	ug/L			08/31/18 12:53	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 12:53	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 12:53	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 12:53	1

Client Sample ID: SW-04-082718
Date Collected: 08/27/18 15:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-24
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 12:53	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 12:53	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 12:53	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 12:53	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 12:53	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 12:53	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 12:53	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 12:53	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 12:53	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 12:53	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 12:53	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 12:53	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 12:53	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 12:53	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 12:53	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 12:53	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 12:53	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 12:53	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 12:53	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 12:53	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 12:53	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 12:53	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 12:53	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 12:53	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 12:53	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 12:53	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 12:53	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 12:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 12:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*08/31/18 12:53*	*1*
4-Bromofluorobenzene	*118*		*70 - 130*		*08/31/18 12:53*	*1*
Dibromofluoromethane (Surr)	*91*		*70 - 130*		*08/31/18 12:53*	*1*
Toluene-d8 (Surr)	*83*		*70 - 130*		*08/31/18 12:53*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:12	08/30/18 07:45	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/29/18 09:12*	*08/30/18 07:45*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**4.67**		0.60	0.33	mg/L			08/30/18 16:36	1

Client Sample ID: SW-04-082718
Date Collected: 08/27/18 15:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-24
Matrix: Water

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**58.0**	**D**	2.40	1.56	mg/L			08/31/18 22:10	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 21:56	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 21:56	2
Barium	**12.3**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 21:56	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 21:56	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 21:56	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:56	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:56	2
Copper	**2.0**	**J**	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 21:56	2
Manganese	**69.4**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 21:56	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 21:56	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 21:56	2
Antimony	**0.79**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 21:56	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 21:56	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 21:56	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 21:56	2
Aluminum	**35.3**	**J**	40.0	15.0	ug/L		09/05/18 08:59	09/12/18 21:56	2
Sodium	**42200**		200	75.7	ug/L		09/05/18 08:59	09/12/18 21:56	2
Magnesium	**6090**		200	65.7	ug/L		09/05/18 08:59	09/12/18 21:56	2
Potassium	**1700**		200	64.9	ug/L		09/05/18 08:59	09/12/18 21:56	2
Calcium	**20400**		200	67.6	ug/L		09/05/18 08:59	09/12/18 21:56	2
Iron	**431**		120	45.7	ug/L		09/05/18 08:59	09/12/18 21:56	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 21:56	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 02:47	09/11/18 15:03	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 02:47	09/11/18 15:03	2
Barium	**12.4**		4.0	1.1	ug/L		09/05/18 02:47	09/11/18 15:03	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 02:47	09/11/18 15:03	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 02:47	09/11/18 15:03	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 15:03	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 15:03	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 02:47	09/11/18 15:03	2
Manganese	**25.4**		8.0	2.7	ug/L		09/05/18 02:47	09/11/18 15:03	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 15:03	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 02:47	09/11/18 15:03	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 02:47	09/11/18 15:03	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 02:47	09/11/18 15:03	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 02:47	09/11/18 15:03	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 02:47	09/11/18 15:03	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 02:47	09/11/18 15:03	2
Sodium	**44000**		200	75.7	ug/L		09/05/18 02:47	09/11/18 15:03	2
Magnesium	**6270**		200	65.7	ug/L		09/05/18 02:47	09/11/18 15:03	2
Potassium	**1730**		200	64.9	ug/L		09/05/18 02:47	09/11/18 15:03	2
Calcium	**21700**		200	67.6	ug/L		09/05/18 02:47	09/11/18 15:03	2
Iron	**73.0**	**J**	120	45.7	ug/L		09/05/18 02:47	09/11/18 15:03	2

Client Sample ID: SW-04-082718

Lab Sample ID: 460-163415-24

Date Collected: 08/27/18 15:45

Matrix: Water

Date Received: 08/28/18 15:05

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 02:47	09/11/18 15:03	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:27	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 10:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:48	1
Bicarbonate Alkalinity as CaCO3	**68.1**		5.0	5.0	mg/L			08/30/18 17:17	1
Alkalinity	**68.1**		5.0	5.0	mg/L			08/30/18 17:17	1

Client Sample ID: SW-17-082718

Lab Sample ID: 460-163415-25

Date Collected: 08/27/18 16:00

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/09/18 23:45	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/09/18 23:45	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/09/18 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*09/09/18 23:45*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 00:21	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 00:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 00:21	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 00:21	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 00:21	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 00:21	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 00:21	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 00:21	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 00:21	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 00:21	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 00:21	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 00:21	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 00:21	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 00:21	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 00:21	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 00:21	1
Acetone	**7.7**		5.0	5.0	ug/L			09/01/18 00:21	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 00:21	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 00:21	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 00:21	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: SW-17-082718
Date Collected: 08/27/18 16:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-25
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/01/18 00:21	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 00:21	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 00:21	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 00:21	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 00:21	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 00:21	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 00:21	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 00:21	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 00:21	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 00:21	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 00:21	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 00:21	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 00:21	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 00:21	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 00:21	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 00:21	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 00:21	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 00:21	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 00:21	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 00:21	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 00:21	1
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 00:21	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 00:21	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 00:21	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 00:21	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 00:21	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 00:21	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 00:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/18 00:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*		*09/01/18 00:21*	*1*
4-Bromofluorobenzene	*123*		*70 - 130*		*09/01/18 00:21*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*09/01/18 00:21*	*1*
Toluene-d8 (Surr)	*82*		*70 - 130*		*09/01/18 00:21*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:12	08/30/18 08:02	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*34*		*10 - 150*	*08/29/18 09:12*	*08/30/18 08:02*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**4.53**		0.60	0.33	mg/L			08/30/18 16:59	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: SW-17-082718
Date Collected: 08/27/18 16:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-25
Matrix: Water

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**59.4**	**D**	2.40	1.56	mg/L			08/31/18 22:49	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 22:02	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 22:02	2
Barium	**13.3**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 22:02	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 22:02	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 22:02	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 22:02	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 22:02	2
Copper	**2.4**	**J**	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 22:02	2
Manganese	**120**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 22:02	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 22:02	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 22:02	2
Antimony	**0.74**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 22:02	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 22:02	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 22:02	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 22:02	2
Aluminum	**51.7**		40.0	15.0	ug/L		09/05/18 08:59	09/12/18 22:02	2
Sodium	**40500**		200	75.7	ug/L		09/05/18 08:59	09/12/18 22:02	2
Magnesium	**6120**		200	65.7	ug/L		09/05/18 08:59	09/12/18 22:02	2
Potassium	**1740**		200	64.9	ug/L		09/05/18 08:59	09/12/18 22:02	2
Calcium	**20600**		200	67.6	ug/L		09/05/18 08:59	09/12/18 22:02	2
Iron	**602**		120	45.7	ug/L		09/05/18 08:59	09/12/18 22:02	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 22:02	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 02:47	09/11/18 18:54	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 02:47	09/11/18 18:54	2
Barium	**12.6**		4.0	1.1	ug/L		09/05/18 02:47	09/11/18 18:54	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 02:47	09/11/18 18:54	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 02:47	09/11/18 18:54	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 18:54	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 18:54	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 02:47	09/11/18 18:54	2
Manganese	**45.0**		8.0	2.7	ug/L		09/05/18 02:47	09/11/18 18:54	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 18:54	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 02:47	09/11/18 18:54	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 02:47	09/11/18 18:54	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 02:47	09/11/18 18:54	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 02:47	09/11/18 18:54	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 02:47	09/11/18 18:54	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 02:47	09/11/18 18:54	2
Sodium	**43300**		200	75.7	ug/L		09/05/18 02:47	09/11/18 18:54	2
Magnesium	**6480**		200	65.7	ug/L		09/05/18 02:47	09/11/18 18:54	2
Potassium	**1760**		200	64.9	ug/L		09/05/18 02:47	09/11/18 18:54	2
Calcium	**22500**		200	67.6	ug/L		09/05/18 02:47	09/11/18 18:54	2
Iron	**70.6**	**J**	120	45.7	ug/L		09/05/18 02:47	09/11/18 18:54	2

Client Sample ID: SW-17-082718

Lab Sample ID: 460-163415-25
Date Collected: 08/27/18 16:00
Matrix: Water
Date Received: 08/28/18 15:05

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 02:47	09/11/18 18:54	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:55	09/04/18 10:57	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 10:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:49	1
Bicarbonate Alkalinity as CaCO3	**69.6**		5.0	5.0	mg/L			08/30/18 17:25	1
Alkalinity	**69.6**		5.0	5.0	mg/L			08/30/18 17:25	1

Client Sample ID: SP-00-082718

Lab Sample ID: 460-163415-26
Date Collected: 08/27/18 14:20
Matrix: Water
Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/09/18 22:59	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/09/18 22:59	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/09/18 22:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*09/09/18 22:59*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 09:16	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 09:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 09:16	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 09:16	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 09:16	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 09:16	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 09:16	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 09:16	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 09:16	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 09:16	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 09:16	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 09:16	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 09:16	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 09:16	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 09:16	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 09:16	1
Acetone	**11**		5.0	5.0	ug/L			08/31/18 09:16	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 09:16	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 09:16	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 09:16	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: SP-00-082718
Date Collected: 08/27/18 14:20
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-26
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 09:16	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 09:16	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 09:16	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 09:16	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 09:16	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 09:16	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 09:16	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 09:16	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 09:16	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 09:16	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 09:16	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 09:16	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 09:16	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 09:16	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 09:16	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 09:16	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 09:16	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 09:16	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 09:16	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 09:16	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 09:16	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 09:16	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 09:16	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 09:16	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 09:16	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 09:16	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 09:16	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 09:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 09:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*08/31/18 09:16*	*1*
4-Bromofluorobenzene	*116*		*70 - 130*		*08/31/18 09:16*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*08/31/18 09:16*	*1*
Toluene-d8 (Surr)	*83*		*70 - 130*		*08/31/18 09:16*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:12	08/30/18 06:15	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*10 - 150*	*08/29/18 09:12*	*08/30/18 06:15*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**4.58**		0.60	0.33	mg/L			08/30/18 14:55	1

Client Sample ID: SP-00-082718
Date Collected: 08/27/18 14:20
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-26
Matrix: Water

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**22.1**	**D**	1.20	0.78	mg/L			08/31/18 21:02	10

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 09:00	09/05/18 19:10	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 09:00	09/05/18 19:10	2
Barium	**9.5**		4.0	1.1	ug/L		09/05/18 09:00	09/05/18 19:10	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 09:00	09/05/18 19:10	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 09:00	09/05/18 19:10	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 09:00	09/05/18 19:10	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 09:00	09/05/18 19:10	2
Copper	**4.4**		4.0	1.9	ug/L		09/05/18 09:00	09/05/18 19:10	2
Manganese	**47.5**		8.0	2.7	ug/L		09/05/18 09:00	09/05/18 19:10	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 09:00	09/05/18 19:10	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 09:00	09/05/18 19:10	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 09:00	09/05/18 19:10	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 09:00	09/05/18 19:10	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 09:00	09/05/18 19:10	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 09:00	09/05/18 19:10	2
Aluminum	**54.7**		40.0	15.0	ug/L		09/05/18 09:00	09/05/18 19:10	2
Sodium	**14600**		200	75.7	ug/L		09/05/18 09:00	09/05/18 19:10	2
Magnesium	**2750**		200	65.7	ug/L		09/05/18 09:00	09/05/18 19:10	2
Potassium	**657**		200	64.9	ug/L		09/05/18 09:00	09/05/18 19:10	2
Calcium	**8770**		200	67.6	ug/L		09/05/18 09:00	09/05/18 19:10	2
Iron	**474**		120	45.7	ug/L		09/05/18 09:00	09/05/18 19:10	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 09:00	09/05/18 19:10	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 02:47	09/11/18 15:27	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 02:47	09/11/18 15:27	2
Barium	**7.9**		4.0	1.1	ug/L		09/05/18 02:47	09/11/18 15:27	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 02:47	09/11/18 15:27	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 02:47	09/11/18 15:27	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 15:27	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 15:27	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 02:47	09/11/18 15:27	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 02:47	09/11/18 15:27	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 15:27	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 02:47	09/11/18 15:27	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 02:47	09/11/18 15:27	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 02:47	09/11/18 15:27	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 02:47	09/11/18 15:27	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 02:47	09/11/18 15:27	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 02:47	09/11/18 15:27	2
Sodium	**13800**		200	75.7	ug/L		09/05/18 02:47	09/11/18 15:27	2
Magnesium	**2500**		200	65.7	ug/L		09/05/18 02:47	09/11/18 15:27	2
Potassium	**618**		200	64.9	ug/L		09/05/18 02:47	09/11/18 15:27	2
Calcium	**8450**		200	67.6	ug/L		09/05/18 02:47	09/11/18 15:27	2
Iron	**161**		120	45.7	ug/L		09/05/18 02:47	09/11/18 15:27	2

Client Sample ID: SP-00-082718

Date Collected: 08/27/18 14:20
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-26

Matrix: Water

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 02:47	09/11/18 15:27	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:08	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 09:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:50	1
Bicarbonate Alkalinity as CaCO3	**25.2**		5.0	5.0	mg/L			08/30/18 18:36	1
Alkalinity	**25.2**		5.0	5.0	mg/L			08/30/18 18:36	1

Client Sample ID: SP-01-082718

Date Collected: 08/27/18 13:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-27

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/10/18 00:08	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/10/18 00:08	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/10/18 00:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 130*		*09/10/18 00:08*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 13:41	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 13:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 13:41	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 13:41	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 13:41	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 13:41	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 13:41	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 13:41	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 13:41	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 13:41	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 13:41	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 13:41	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 13:41	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 13:41	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 13:41	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 13:41	1
Acetone	**6.4**		5.0	5.0	ug/L			08/31/18 13:41	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 13:41	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 13:41	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 13:41	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: SP-01-082718
Date Collected: 08/27/18 13:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-27
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 13:41	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 13:41	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 13:41	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 13:41	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 13:41	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 13:41	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 13:41	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 13:41	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 13:41	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 13:41	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 13:41	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 13:41	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 13:41	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 13:41	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 13:41	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 13:41	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 13:41	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 13:41	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 13:41	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 13:41	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 13:41	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 13:41	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 13:41	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 13:41	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 13:41	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 13:41	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 13:41	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 13:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 13:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*08/31/18 13:41*	*1*
4-Bromofluorobenzene	*123*		*70 - 130*		*08/31/18 13:41*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*08/31/18 13:41*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*08/31/18 13:41*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:12	08/30/18 08:20	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*10 - 150*	*08/29/18 09:12*	*08/30/18 08:20*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**4.62**		0.60	0.33	mg/L			08/30/18 17:10	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: SP-01-082718
Date Collected: 08/27/18 13:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-27
Matrix: Water

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.7**	**D**	2.40	1.56	mg/L			08/31/18 23:02	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 22:13	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 22:13	2
Barium	**10.4**		4.0	1.1	ug/L		09/05/18 08:59	09/12/18 22:13	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 22:13	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 22:13	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 22:13	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 22:13	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 22:13	2
Manganese	**105**		8.0	2.7	ug/L		09/05/18 08:59	09/12/18 22:13	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 22:13	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 22:13	2
Antimony	**0.78**	**J**	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 22:13	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 22:13	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 22:13	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 22:13	2
Aluminum	**34.1**	**J**	40.0	15.0	ug/L		09/05/18 08:59	09/12/18 22:13	2
Sodium	**14900**		200	75.7	ug/L		09/05/18 08:59	09/12/18 22:13	2
Magnesium	**2700**		200	65.7	ug/L		09/05/18 08:59	09/12/18 22:13	2
Potassium	**681**		200	64.9	ug/L		09/05/18 08:59	09/12/18 22:13	2
Calcium	**8820**		200	67.6	ug/L		09/05/18 08:59	09/12/18 22:13	2
Iron	**516**		120	45.7	ug/L		09/05/18 08:59	09/12/18 22:13	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 22:13	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 02:47	09/11/18 18:57	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 02:47	09/11/18 18:57	2
Barium	**9.5**		4.0	1.1	ug/L		09/05/18 02:47	09/11/18 18:57	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 02:47	09/11/18 18:57	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 02:47	09/11/18 18:57	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 18:57	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 18:57	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 02:47	09/11/18 18:57	2
Manganese	**25.9**		8.0	2.7	ug/L		09/05/18 02:47	09/11/18 18:57	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 18:57	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 02:47	09/11/18 18:57	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 02:47	09/11/18 18:57	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 02:47	09/11/18 18:57	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 02:47	09/11/18 18:57	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 02:47	09/11/18 18:57	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 02:47	09/11/18 18:57	2
Sodium	**15600**		200	75.7	ug/L		09/05/18 02:47	09/11/18 18:57	2
Magnesium	**2830**		200	65.7	ug/L		09/05/18 02:47	09/11/18 18:57	2
Potassium	**685**		200	64.9	ug/L		09/05/18 02:47	09/11/18 18:57	2
Calcium	**9600**		200	67.6	ug/L		09/05/18 02:47	09/11/18 18:57	2
Iron	**205**		120	45.7	ug/L		09/05/18 02:47	09/11/18 18:57	2

Client Sample ID: SP-01-082718

Lab Sample ID: 460-163415-27

Date Collected: 08/27/18 13:45

Matrix: Water

Date Received: 08/28/18 15:05

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 02:47	09/11/18 18:57	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:29	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U F2 F1	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 10:59	1
Bicarbonate Alkalinity as CaCO3	**25.3**		5.0	5.0	mg/L			08/30/18 17:33	1
Alkalinity	**25.3**		5.0	5.0	mg/L			08/30/18 17:33	1

Client Sample ID: RC-02-082718

Lab Sample ID: 460-163415-28

Date Collected: 08/27/18 13:25

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/10/18 00:32	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/10/18 00:32	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/10/18 00:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*09/10/18 00:32*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 14:05	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 14:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 14:05	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 14:05	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 14:05	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 14:05	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 14:05	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 14:05	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 14:05	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 14:05	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 14:05	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 14:05	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 14:05	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 14:05	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 14:05	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 14:05	1
Acetone	5.0	U	5.0	5.0	ug/L			08/31/18 14:05	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 14:05	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 14:05	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 14:05	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: RC-02-082718
Date Collected: 08/27/18 13:25
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-28
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 14:05	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 14:05	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 14:05	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 14:05	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 14:05	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 14:05	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 14:05	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 14:05	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 14:05	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 14:05	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 14:05	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 14:05	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 14:05	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 14:05	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 14:05	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 14:05	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 14:05	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 14:05	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 14:05	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 14:05	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 14:05	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 14:05	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 14:05	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 14:05	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 14:05	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 14:05	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 14:05	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 14:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 14:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*08/31/18 14:05*	*1*
4-Bromofluorobenzene	*123*		*70 - 130*		*08/31/18 14:05*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*08/31/18 14:05*	*1*
Toluene-d8 (Surr)	*83*		*70 - 130*		*08/31/18 14:05*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:12	08/30/18 08:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/29/18 09:12*	*08/30/18 08:38*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**4.63**		0.60	0.33	mg/L			08/30/18 17:21	1

Client Sample ID: RC-02-082718
Date Collected: 08/27/18 13:25
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-28
Matrix: Water

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**22.2**	**D**	2.40	1.56	mg/L			08/31/18 23:16	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 09:25	09/12/18 22:15	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 09:25	09/12/18 22:15	2
Barium	**9.0**		4.0	1.1	ug/L		09/05/18 09:25	09/12/18 22:15	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 09:25	09/12/18 22:15	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 09:25	09/12/18 22:15	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 09:25	09/12/18 22:15	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 09:25	09/12/18 22:15	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 09:25	09/12/18 22:15	2
Manganese	**78.8**		8.0	2.7	ug/L		09/05/18 09:25	09/12/18 22:15	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 09:25	09/12/18 22:15	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 09:25	09/12/18 22:15	2
Antimony	**0.82**	**J**	2.0	0.62	ug/L		09/05/18 09:25	09/12/18 22:15	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 09:25	09/12/18 22:15	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 09:25	09/12/18 22:15	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 09:25	09/12/18 22:15	2
Aluminum	**38.7**	**J**	40.0	15.0	ug/L		09/05/18 09:25	09/12/18 22:15	2
Sodium	**14900**		200	75.7	ug/L		09/05/18 09:25	09/12/18 22:15	2
Magnesium	**2670**		200	65.7	ug/L		09/05/18 09:25	09/12/18 22:15	2
Potassium	**696**		200	64.9	ug/L		09/05/18 09:25	09/12/18 22:15	2
Calcium	**8870**		200	67.6	ug/L		09/05/18 09:25	09/12/18 22:15	2
Iron	**480**		120	45.7	ug/L		09/05/18 09:25	09/12/18 22:15	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 09:25	09/12/18 22:15	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 02:47	09/11/18 19:00	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 02:47	09/11/18 19:00	2
Barium	**9.5**		4.0	1.1	ug/L		09/05/18 02:47	09/11/18 19:00	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 02:47	09/11/18 19:00	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 02:47	09/11/18 19:00	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:00	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:00	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 02:47	09/11/18 19:00	2
Manganese	**13.1**		8.0	2.7	ug/L		09/05/18 02:47	09/11/18 19:00	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:00	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 02:47	09/11/18 19:00	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 02:47	09/11/18 19:00	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 02:47	09/11/18 19:00	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 02:47	09/11/18 19:00	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 02:47	09/11/18 19:00	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 02:47	09/11/18 19:00	2
Sodium	**15500**		200	75.7	ug/L		09/05/18 02:47	09/11/18 19:00	2
Magnesium	**2740**		200	65.7	ug/L		09/05/18 02:47	09/11/18 19:00	2
Potassium	**680**		200	64.9	ug/L		09/05/18 02:47	09/11/18 19:00	2
Calcium	**9100**		200	67.6	ug/L		09/05/18 02:47	09/11/18 19:00	2
Iron	**168**		120	45.7	ug/L		09/05/18 02:47	09/11/18 19:00	2

Client Sample ID: RC-02-082718

Lab Sample ID: 460-163415-28

Date Collected: 08/27/18 13:25

Matrix: Water

Date Received: 08/28/18 15:05

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 02:47	09/11/18 19:00	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:31	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 10:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 11:02	1
Bicarbonate Alkalinity as CaCO3	**24.6**		5.0	5.0	mg/L			08/30/18 17:42	1
Alkalinity	**24.6**		5.0	5.0	mg/L			08/30/18 17:42	1

Client Sample ID: RC-01-082718

Lab Sample ID: 460-163415-29

Date Collected: 08/27/18 12:45

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/06/18 20:27	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/06/18 20:27	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/06/18 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/06/18 20:27*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 14:30	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 14:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 14:30	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 14:30	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 14:30	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 14:30	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 14:30	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 14:30	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 14:30	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 14:30	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 14:30	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 14:30	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 14:30	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 14:30	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 14:30	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 14:30	1
Acetone	**6.6**		5.0	5.0	ug/L			08/31/18 14:30	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 14:30	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 14:30	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 14:30	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: RC-01-082718
Date Collected: 08/27/18 12:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-29
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 14:30	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 14:30	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 14:30	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 14:30	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 14:30	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 14:30	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 14:30	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 14:30	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 14:30	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 14:30	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 14:30	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 14:30	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 14:30	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 14:30	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 14:30	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 14:30	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 14:30	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 14:30	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 14:30	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 14:30	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 14:30	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 14:30	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 14:30	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 14:30	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 14:30	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 14:30	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 14:30	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 14:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 14:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*08/31/18 14:30*	*1*
4-Bromofluorobenzene	*117*		*70 - 130*		*08/31/18 14:30*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*		*08/31/18 14:30*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*08/31/18 14:30*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:12	08/30/18 08:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/29/18 09:12*	*08/30/18 08:56*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**4.58**		0.60	0.33	mg/L			08/30/18 17:32	1

Client Sample ID: RC-01-082718
Date Collected: 08/27/18 12:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-29
Matrix: Water

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.8**	**D**	1.20	0.78	mg/L			08/31/18 23:29	10

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 09:25	09/12/18 22:18	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 09:25	09/12/18 22:18	2
Barium	**8.7**		4.0	1.1	ug/L		09/05/18 09:25	09/12/18 22:18	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 09:25	09/12/18 22:18	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 09:25	09/12/18 22:18	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 09:25	09/12/18 22:18	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 09:25	09/12/18 22:18	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 09:25	09/12/18 22:18	2
Manganese	**58.2**		8.0	2.7	ug/L		09/05/18 09:25	09/12/18 22:18	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 09:25	09/12/18 22:18	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 09:25	09/12/18 22:18	2
Antimony	**0.78**	**J**	2.0	0.62	ug/L		09/05/18 09:25	09/12/18 22:18	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 09:25	09/12/18 22:18	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 09:25	09/12/18 22:18	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 09:25	09/12/18 22:18	2
Aluminum	**48.6**		40.0	15.0	ug/L		09/05/18 09:25	09/12/18 22:18	2
Sodium	**14700**		200	75.7	ug/L		09/05/18 09:25	09/12/18 22:18	2
Magnesium	**2530**		200	65.7	ug/L		09/05/18 09:25	09/12/18 22:18	2
Potassium	**584**		200	64.9	ug/L		09/05/18 09:25	09/12/18 22:18	2
Calcium	**8180**		200	67.6	ug/L		09/05/18 09:25	09/12/18 22:18	2
Iron	**416**		120	45.7	ug/L		09/05/18 09:25	09/12/18 22:18	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 09:25	09/12/18 22:18	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 02:47	09/11/18 19:02	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 02:47	09/11/18 19:02	2
Barium	**8.2**		4.0	1.1	ug/L		09/05/18 02:47	09/11/18 19:02	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 02:47	09/11/18 19:02	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 02:47	09/11/18 19:02	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:02	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:02	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 02:47	09/11/18 19:02	2
Manganese	**6.4**	**J**	8.0	2.7	ug/L		09/05/18 02:47	09/11/18 19:02	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:02	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 02:47	09/11/18 19:02	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 02:47	09/11/18 19:02	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 02:47	09/11/18 19:02	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 02:47	09/11/18 19:02	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 02:47	09/11/18 19:02	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 02:47	09/11/18 19:02	2
Sodium	**15300**		200	75.7	ug/L		09/05/18 02:47	09/11/18 19:02	2
Magnesium	**2690**		200	65.7	ug/L		09/05/18 02:47	09/11/18 19:02	2
Potassium	**605**		200	64.9	ug/L		09/05/18 02:47	09/11/18 19:02	2
Calcium	**9090**		200	67.6	ug/L		09/05/18 02:47	09/11/18 19:02	2
Iron	**158**		120	45.7	ug/L		09/05/18 02:47	09/11/18 19:02	2

Client Sample ID: RC-01-082718

Lab Sample ID: 460-163415-29

Date Collected: 08/27/18 12:45

Matrix: Water

Date Received: 08/28/18 15:05

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 02:47	09/11/18 19:02	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:32	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 10:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 11:06	1
Bicarbonate Alkalinity as CaCO3	**22.7**		5.0	5.0	mg/L			08/30/18 17:49	1
Alkalinity	**22.7**		5.0	5.0	mg/L			08/30/18 17:49	1

Client Sample ID: PAB-03A-082718

Lab Sample ID: 460-163415-30

Date Collected: 08/27/18 15:20

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/06/18 20:50	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/06/18 20:50	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/06/18 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*09/06/18 20:50*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 14:54	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 14:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 14:54	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 14:54	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 14:54	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 14:54	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 14:54	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 14:54	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 14:54	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 14:54	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 14:54	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 14:54	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 14:54	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 14:54	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 14:54	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 14:54	1
Acetone	**5.3**		5.0	5.0	ug/L			08/31/18 14:54	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 14:54	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 14:54	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 14:54	1

Client Sample ID: PAB-03A-082718

Date Collected: 08/27/18 15:20
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-30

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 14:54	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 14:54	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 14:54	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 14:54	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 14:54	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 14:54	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 14:54	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 14:54	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 14:54	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 14:54	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 14:54	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 14:54	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 14:54	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 14:54	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 14:54	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 14:54	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 14:54	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 14:54	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 14:54	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 14:54	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 14:54	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 14:54	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 14:54	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 14:54	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 14:54	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 14:54	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 14:54	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 14:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 14:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*08/31/18 14:54*	*1*
4-Bromofluorobenzene	*119*		*70 - 130*		*08/31/18 14:54*	*1*
Dibromofluoromethane (Surr)	*87*		*70 - 130*		*08/31/18 14:54*	*1*
Toluene-d8 (Surr)	*82*		*70 - 130*		*08/31/18 14:54*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.42**		0.20	0.016	ug/L		08/29/18 09:12	08/30/18 09:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*10 - 150*	*08/29/18 09:12*	*08/30/18 09:14*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.41**		0.12	0.078	mg/L			08/30/18 17:44	1
Sulfate	**1.92**		0.60	0.33	mg/L			08/30/18 17:44	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: PAB-03A-082718
Date Collected: 08/27/18 15:20
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-30
Matrix: Water

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 09:25	09/12/18 22:23	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 09:25	09/12/18 22:23	2
Barium	**21.0**		4.0	1.1	ug/L		09/05/18 09:25	09/12/18 22:23	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 09:25	09/12/18 22:23	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 09:25	09/12/18 22:23	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 09:25	09/12/18 22:23	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 09:25	09/12/18 22:23	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 09:25	09/12/18 22:23	2
Manganese	**70.7**		8.0	2.7	ug/L		09/05/18 09:25	09/12/18 22:23	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 09:25	09/12/18 22:23	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 09:25	09/12/18 22:23	2
Antimony	**0.88**	**J**	2.0	0.62	ug/L		09/05/18 09:25	09/12/18 22:23	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 09:25	09/12/18 22:23	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 09:25	09/12/18 22:23	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 09:25	09/12/18 22:23	2
Aluminum	**44.0**		40.0	15.0	ug/L		09/05/18 09:25	09/12/18 22:23	2
Sodium	**5390**		200	75.7	ug/L		09/05/18 09:25	09/12/18 22:23	2
Magnesium	**3830**		200	65.7	ug/L		09/05/18 09:25	09/12/18 22:23	2
Potassium	**732**		200	64.9	ug/L		09/05/18 09:25	09/12/18 22:23	2
Calcium	**17700**		200	67.6	ug/L		09/05/18 09:25	09/12/18 22:23	2
Iron	**1080**		120	45.7	ug/L		09/05/18 09:25	09/12/18 22:23	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 09:25	09/12/18 22:23	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 02:47	09/11/18 19:05	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 02:47	09/11/18 19:05	2
Barium	**19.9**		4.0	1.1	ug/L		09/05/18 02:47	09/11/18 19:05	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 02:47	09/11/18 19:05	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 02:47	09/11/18 19:05	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:05	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:05	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 02:47	09/11/18 19:05	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 02:47	09/11/18 19:05	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:05	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 02:47	09/11/18 19:05	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 02:47	09/11/18 19:05	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 02:47	09/11/18 19:05	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 02:47	09/11/18 19:05	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 02:47	09/11/18 19:05	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 02:47	09/11/18 19:05	2
Sodium	**5620**		200	75.7	ug/L		09/05/18 02:47	09/11/18 19:05	2
Magnesium	**4060**		200	65.7	ug/L		09/05/18 02:47	09/11/18 19:05	2
Potassium	**766**		200	64.9	ug/L		09/05/18 02:47	09/11/18 19:05	2
Calcium	**19100**		200	67.6	ug/L		09/05/18 02:47	09/11/18 19:05	2
Iron	**116**	**J**	120	45.7	ug/L		09/05/18 02:47	09/11/18 19:05	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 02:47	09/11/18 19:05	2

Client Sample ID: PAB-03A-082718

Lab Sample ID: 460-163415-30

Date Collected: 08/27/18 15:20

Matrix: Water

Date Received: 08/28/18 15:05

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:34	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 10:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 11:07	1
Bicarbonate Alkalinity as CaCO3	**61.4**		5.0	5.0	mg/L			08/30/18 17:57	1
Alkalinity	**61.4**		5.0	5.0	mg/L			08/30/18 17:57	1

Client Sample ID: PAB-04-082718

Lab Sample ID: 460-163415-31

Date Collected: 08/27/18 14:50

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/06/18 21:13	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/06/18 21:13	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/06/18 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*09/06/18 21:13*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 00:45	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 00:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 00:45	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 00:45	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 00:45	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 00:45	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 00:45	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 00:45	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 00:45	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 00:45	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 00:45	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 00:45	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 00:45	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 00:45	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 00:45	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 00:45	1
Acetone	**5.1**		5.0	5.0	ug/L			09/01/18 00:45	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 00:45	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 00:45	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 00:45	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/01/18 00:45	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 00:45	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 00:45	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 00:45	1

Client Sample ID: PAB-04-082718
Date Collected: 08/27/18 14:50
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-31
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 00:45	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 00:45	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 00:45	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 00:45	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 00:45	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 00:45	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 00:45	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 00:45	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 00:45	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 00:45	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 00:45	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 00:45	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 00:45	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 00:45	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 00:45	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 00:45	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 00:45	1
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 00:45	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 00:45	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 00:45	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 00:45	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 00:45	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 00:45	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 00:45	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/18 00:45*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*09/01/18 00:45*	*1*
4-Bromofluorobenzene	*122*		*70 - 130*		*09/01/18 00:45*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*		*09/01/18 00:45*	*1*
Toluene-d8 (Surr)	*81*		*70 - 130*		*09/01/18 00:45*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.40**		0.20	0.016	ug/L		08/29/18 09:12	08/30/18 09:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*33*		*10 - 150*	*08/29/18 09:12*	*08/30/18 09:32*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.25**		0.12	0.078	mg/L			08/30/18 17:55	1
Sulfate	**2.02**		0.60	0.33	mg/L			08/30/18 17:55	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 09:25	09/12/18 22:29	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 09:25	09/12/18 22:29	2
Barium	**21.5**		4.0	1.1	ug/L		09/05/18 09:25	09/12/18 22:29	2

Client Sample ID: PAB-04-082718

Date Collected: 08/27/18 14:50
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-31

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 09:25	09/12/18 22:29	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 09:25	09/12/18 22:29	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 09:25	09/12/18 22:29	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 09:25	09/12/18 22:29	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 09:25	09/12/18 22:29	2
Manganese	**85.1**		8.0	2.7	ug/L		09/05/18 09:25	09/12/18 22:29	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 09:25	09/12/18 22:29	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 09:25	09/12/18 22:29	2
Antimony	**0.72**	**J**	2.0	0.62	ug/L		09/05/18 09:25	09/12/18 22:29	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 09:25	09/12/18 22:29	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 09:25	09/12/18 22:29	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 09:25	09/12/18 22:29	2
Aluminum	**62.7**		40.0	15.0	ug/L		09/05/18 09:25	09/12/18 22:29	2
Sodium	**5310**		200	75.7	ug/L		09/05/18 09:25	09/12/18 22:29	2
Magnesium	**3760**		200	65.7	ug/L		09/05/18 09:25	09/12/18 22:29	2
Potassium	**747**		200	64.9	ug/L		09/05/18 09:25	09/12/18 22:29	2
Calcium	**17200**		200	67.6	ug/L		09/05/18 09:25	09/12/18 22:29	2
Iron	**922**		120	45.7	ug/L		09/05/18 09:25	09/12/18 22:29	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 09:25	09/12/18 22:29	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 02:47	09/11/18 19:08	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 02:47	09/11/18 19:08	2
Barium	**19.0**		4.0	1.1	ug/L		09/05/18 02:47	09/11/18 19:08	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 02:47	09/11/18 19:08	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 02:47	09/11/18 19:08	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:08	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:08	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 02:47	09/11/18 19:08	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 02:47	09/11/18 19:08	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:08	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 02:47	09/11/18 19:08	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 02:47	09/11/18 19:08	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 02:47	09/11/18 19:08	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 02:47	09/11/18 19:08	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 02:47	09/11/18 19:08	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 02:47	09/11/18 19:08	2
Sodium	**5530**		200	75.7	ug/L		09/05/18 02:47	09/11/18 19:08	2
Magnesium	**3970**		200	65.7	ug/L		09/05/18 02:47	09/11/18 19:08	2
Potassium	**769**		200	64.9	ug/L		09/05/18 02:47	09/11/18 19:08	2
Calcium	**18700**		200	67.6	ug/L		09/05/18 02:47	09/11/18 19:08	2
Iron	**92.4**	**J**	120	45.7	ug/L		09/05/18 02:47	09/11/18 19:08	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 02:47	09/11/18 19:08	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:36	1

Client Sample ID: PAB-04-082718

Lab Sample ID: 460-163415-31
Matrix: Water
Date Collected: 08/27/18 14:50
Date Received: 08/28/18 15:05

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 10:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 11:08	1
Bicarbonate Alkalinity as CaCO3	**59.9**		5.0	5.0	mg/L			08/30/18 18:05	1
Alkalinity	**59.9**		5.0	5.0	mg/L			08/30/18 18:05	1

Client Sample ID: NOB-02-082718

Lab Sample ID: 460-163415-32
Matrix: Water
Date Collected: 08/27/18 15:05
Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/06/18 21:37	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/06/18 21:37	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/06/18 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/06/18 21:37*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 15:43	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 15:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 15:43	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 15:43	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 15:43	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 15:43	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 15:43	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 15:43	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 15:43	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 15:43	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 15:43	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 15:43	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 15:43	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 15:43	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 15:43	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 15:43	1
Acetone	**6.4**		5.0	5.0	ug/L			08/31/18 15:43	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 15:43	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 15:43	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 15:43	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 15:43	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 15:43	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 15:43	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 15:43	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 15:43	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 15:43	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 15:43	1

Client Sample ID: NOB-02-082718
Date Collected: 08/27/18 15:05
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-32
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 15:43	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 15:43	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 15:43	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 15:43	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 15:43	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 15:43	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 15:43	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 15:43	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 15:43	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 15:43	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 15:43	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 15:43	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 15:43	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 15:43	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 15:43	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 15:43	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 15:43	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 15:43	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 15:43	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 15:43	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 15:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 15:43*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*		*08/31/18 15:43*	*1*
4-Bromofluorobenzene	*121*		*70 - 130*		*08/31/18 15:43*	*1*
Dibromofluoromethane (Surr)	*87*		*70 - 130*		*08/31/18 15:43*	*1*
Toluene-d8 (Surr)	*82*		*70 - 130*		*08/31/18 15:43*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:12	08/30/18 10:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/29/18 09:12*	*08/30/18 10:42*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.65**		0.12	0.078	mg/L			08/30/18 18:06	1
Sulfate	**3.95**		0.60	0.33	mg/L			08/30/18 18:06	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 09:42	09/05/18 20:17	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 09:42	09/05/18 20:17	2
Barium	**8.1**		4.0	1.1	ug/L		09/05/18 09:42	09/05/18 20:17	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 09:42	09/13/18 05:08	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 09:42	09/05/18 20:17	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 09:42	09/05/18 20:17	2

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: NOB-02-082718
Date Collected: 08/27/18 15:05
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-32
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 09:42	09/05/18 20:17	2
Copper	**3.9**	**J**	4.0	1.9	ug/L		09/05/18 09:42	09/05/18 20:17	2
Manganese	**21.7**		8.0	2.7	ug/L		09/05/18 09:42	09/05/18 20:17	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 09:42	09/05/18 20:17	2
Lead	**0.46**	**J**	1.2	0.37	ug/L		09/05/18 09:42	09/05/18 20:17	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 09:42	09/05/18 20:17	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 09:42	09/05/18 20:17	2
Vanadium	**1.2**	**J**	4.0	1.2	ug/L		09/05/18 09:42	09/05/18 20:17	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 09:42	09/05/18 20:17	2
Aluminum	**208**		40.0	15.0	ug/L		09/05/18 09:42	09/05/18 20:17	2
Sodium	**2970**		200	75.7	ug/L		09/05/18 09:42	09/06/18 19:38	2
Magnesium	**3540**		200	65.7	ug/L		09/05/18 09:42	09/05/18 20:17	2
Potassium	**678**		200	64.9	ug/L		09/05/18 09:42	09/05/18 20:17	2
Calcium	**7810**		200	67.6	ug/L		09/05/18 09:42	09/05/18 20:17	2
Iron	**324**		120	45.7	ug/L		09/05/18 09:42	09/05/18 20:17	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 09:42	09/05/18 20:17	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 02:47	09/11/18 19:10	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 02:47	09/11/18 19:10	2
Barium	**7.2**		4.0	1.1	ug/L		09/05/18 02:47	09/11/18 19:10	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 02:47	09/11/18 19:10	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 02:47	09/11/18 19:10	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:10	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:10	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 02:47	09/11/18 19:10	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 02:47	09/11/18 19:10	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:10	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 02:47	09/11/18 19:10	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 02:47	09/11/18 19:10	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 02:47	09/11/18 19:10	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 02:47	09/11/18 19:10	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 02:47	09/11/18 19:10	2
Aluminum	**19.6**	**J**	40.0	15.0	ug/L		09/05/18 02:47	09/11/18 19:10	2
Sodium	**2960**		200	75.7	ug/L		09/05/18 02:47	09/11/18 19:10	2
Magnesium	**3620**		200	65.7	ug/L		09/05/18 02:47	09/11/18 19:10	2
Potassium	**676**		200	64.9	ug/L		09/05/18 02:47	09/11/18 19:10	2
Calcium	**8490**		200	67.6	ug/L		09/05/18 02:47	09/11/18 19:10	2
Iron	**62.5**	**J**	120	45.7	ug/L		09/05/18 02:47	09/11/18 19:10	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 02:47	09/11/18 19:10	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 10:33	1

Client Sample ID: NOB-02-082718

Lab Sample ID: 460-163415-32

Date Collected: 08/27/18 15:05

Matrix: Water

Date Received: 08/28/18 15:05

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 11:09	1
Bicarbonate Alkalinity as CaCO3	**32.6**		5.0	5.0	mg/L			08/30/18 18:13	1
Alkalinity	**32.6**		5.0	5.0	mg/L			08/30/18 18:13	1

Client Sample ID: RM-01-082718

Lab Sample ID: 460-163415-33

Date Collected: 08/27/18 13:00

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/06/18 22:00	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/06/18 22:00	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/06/18 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*70 - 130*		*09/06/18 22:00*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 16:07	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 16:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 16:07	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 16:07	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 16:07	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 16:07	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 16:07	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 16:07	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 16:07	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 16:07	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 16:07	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 16:07	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 16:07	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 16:07	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 16:07	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 16:07	1
Acetone	**9.5**		5.0	5.0	ug/L			08/31/18 16:07	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 16:07	1
Bromoform	0.54	U *	1.0	0.54	ug/L			08/31/18 16:07	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 16:07	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 16:07	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 16:07	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 16:07	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 16:07	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 16:07	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 16:07	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 16:07	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 16:07	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 16:07	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 16:07	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 16:07	1

Client Sample ID: RM-01-082718
Date Collected: 08/27/18 13:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-33
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 16:07	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 16:07	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 16:07	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 16:07	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 16:07	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 16:07	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 16:07	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 16:07	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 16:07	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 16:07	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 16:07	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 16:07	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 16:07	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 16:07	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 16:07	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 16:07	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 16:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/18 16:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*08/31/18 16:07*	*1*
4-Bromofluorobenzene	*123*		*70 - 130*		*08/31/18 16:07*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/31/18 16:07*	*1*
Toluene-d8 (Surr)	*88*		*70 - 130*		*08/31/18 16:07*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:12	08/30/18 11:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/29/18 09:12*	*08/30/18 11:00*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**5.03**		0.60	0.33	mg/L			08/30/18 19:14	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**23.3**	**D**	1.20	0.78	mg/L			09/01/18 00:09	10

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 09:42	09/05/18 20:20	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 09:42	09/05/18 20:20	2
Barium	**8.7**		4.0	1.1	ug/L		09/05/18 09:42	09/05/18 20:20	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 09:42	09/13/18 05:11	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 09:42	09/05/18 20:20	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 09:42	09/05/18 20:20	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 09:42	09/05/18 20:20	2
Copper	**4.3**		4.0	1.9	ug/L		09/05/18 09:42	09/05/18 20:20	2

Client Sample ID: RM-01-082718

Date Collected: 08/27/18 13:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-33

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**47.2**		8.0	2.7	ug/L		09/05/18 09:42	09/05/18 20:20	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 09:42	09/05/18 20:20	2
Lead	**1.5**		1.2	0.37	ug/L		09/05/18 09:42	09/05/18 20:20	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 09:42	09/05/18 20:20	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 09:42	09/05/18 20:20	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 09:42	09/05/18 20:20	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 09:42	09/05/18 20:20	2
Aluminum	**106**		40.0	15.0	ug/L		09/05/18 09:42	09/05/18 20:20	2
Sodium	**16000**		200	75.7	ug/L		09/05/18 09:42	09/06/18 19:40	2
Magnesium	**2230**		200	65.7	ug/L		09/05/18 09:42	09/05/18 20:20	2
Potassium	**589**		200	64.9	ug/L		09/05/18 09:42	09/05/18 20:20	2
Calcium	**6890**		200	67.6	ug/L		09/05/18 09:42	09/05/18 20:20	2
Iron	**328**		120	45.7	ug/L		09/05/18 09:42	09/05/18 20:20	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 09:42	09/05/18 20:20	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 02:47	09/11/18 19:13	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 02:47	09/11/18 19:13	2
Barium	**8.6**		4.0	1.1	ug/L		09/05/18 02:47	09/11/18 19:13	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 02:47	09/11/18 19:13	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 02:47	09/11/18 19:13	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:13	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:13	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 02:47	09/11/18 19:13	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 02:47	09/11/18 19:13	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:13	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 02:47	09/11/18 19:13	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 02:47	09/11/18 19:13	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 02:47	09/11/18 19:13	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 02:47	09/11/18 19:13	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 02:47	09/11/18 19:13	2
Aluminum	**19.7**	**J**	40.0	15.0	ug/L		09/05/18 02:47	09/11/18 19:13	2
Sodium	**16200**		200	75.7	ug/L		09/05/18 02:47	09/11/18 19:13	2
Magnesium	**2640**		200	65.7	ug/L		09/05/18 02:47	09/11/18 19:13	2
Potassium	**688**		200	64.9	ug/L		09/05/18 02:47	09/11/18 19:13	2
Calcium	**8480**		200	67.6	ug/L		09/05/18 02:47	09/11/18 19:13	2
Iron	**108**	**J**	120	45.7	ug/L		09/05/18 02:47	09/11/18 19:13	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 02:47	09/11/18 19:13	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:39	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 10:35	1

Client Sample ID: RM-01-082718

Lab Sample ID: 460-163415-33

Date Collected: 08/27/18 13:00

Matrix: Water

Date Received: 08/28/18 15:05

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 11:10	1
Bicarbonate Alkalinity as CaCO3	**21.1**		5.0	5.0	mg/L			08/30/18 18:52	1
Alkalinity	**21.1**		5.0	5.0	mg/L			08/30/18 18:52	1

Client Sample ID: PMB-02A-082718

Lab Sample ID: 460-163415-34

Date Collected: 08/27/18 12:05

Matrix: Water

Date Received: 08/28/18 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/06/18 22:23	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/06/18 22:23	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/06/18 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/06/18 22:23*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 02:47	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 02:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 02:47	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 02:47	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 02:47	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 02:47	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 02:47	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 02:47	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 02:47	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 02:47	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 02:47	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 02:47	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 02:47	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 02:47	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 02:47	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 02:47	1
Acetone	**6.0**		5.0	5.0	ug/L			09/01/18 02:47	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 02:47	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 02:47	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 02:47	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/01/18 02:47	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 02:47	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 02:47	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 02:47	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 02:47	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 02:47	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 02:47	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 02:47	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 02:47	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 02:47	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 02:47	1

Client Sample ID: PMB-02A-082718
Date Collected: 08/27/18 12:05
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-34
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 02:47	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 02:47	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 02:47	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 02:47	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 02:47	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 02:47	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 02:47	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 02:47	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 02:47	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 02:47	1
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 02:47	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 02:47	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 02:47	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 02:47	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 02:47	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 02:47	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 02:47	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/18 02:47*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*09/01/18 02:47*	*1*
4-Bromofluorobenzene	*121*		*70 - 130*		*09/01/18 02:47*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*09/01/18 02:47*	*1*
Toluene-d8 (Surr)	*82*		*70 - 130*		*09/01/18 02:47*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:12	08/30/18 11:18	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*08/29/18 09:12*	*08/30/18 11:18*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**5.14**		0.60	0.33	mg/L			08/30/18 19:26	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**53.2**	**D**	3.00	1.95	mg/L			09/01/18 00:22	25

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 09:42	09/05/18 20:22	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 09:42	09/05/18 20:22	2
Barium	**16.7**		4.0	1.1	ug/L		09/05/18 09:42	09/05/18 20:22	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 09:42	09/13/18 14:45	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 09:42	09/05/18 20:22	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 09:42	09/05/18 20:22	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 09:42	09/05/18 20:22	2
Copper	**4.0**		4.0	1.9	ug/L		09/05/18 09:42	09/05/18 20:22	2

Client Sample ID: PMB-02A-082718
Date Collected: 08/27/18 12:05
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-34
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**211**		8.0	2.7	ug/L		09/05/18 09:42	09/05/18 20:22	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 09:42	09/05/18 20:22	2
Lead	**0.50**	**J**	1.2	0.37	ug/L		09/05/18 09:42	09/05/18 20:22	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 09:42	09/05/18 20:22	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 09:42	09/05/18 20:22	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 09:42	09/05/18 20:22	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 09:42	09/05/18 20:22	2
Aluminum	**38.7**	**J**	40.0	15.0	ug/L		09/05/18 09:42	09/05/18 20:22	2
Sodium	**39900**		200	75.7	ug/L		09/05/18 09:42	09/13/18 14:45	2
Magnesium	**9890**		200	65.7	ug/L		09/05/18 09:42	09/05/18 20:22	2
Potassium	**4340**		200	64.9	ug/L		09/05/18 09:42	09/05/18 20:22	2
Calcium	**34500**		200	67.6	ug/L		09/05/18 09:42	09/05/18 20:22	2
Iron	**355**		120	45.7	ug/L		09/05/18 09:42	09/05/18 20:22	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 09:42	09/05/18 20:22	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 02:47	09/11/18 19:29	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 02:47	09/11/18 19:29	2
Barium	**18.9**		4.0	1.1	ug/L		09/05/18 02:47	09/11/18 19:29	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 02:47	09/11/18 19:29	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 02:47	09/11/18 19:29	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:29	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:29	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 02:47	09/11/18 19:29	2
Manganese	**128**		8.0	2.7	ug/L		09/05/18 02:47	09/11/18 19:29	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 19:29	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 02:47	09/11/18 19:29	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 02:47	09/11/18 19:29	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 02:47	09/11/18 19:29	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 02:47	09/11/18 19:29	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 02:47	09/11/18 19:29	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 02:47	09/11/18 19:29	2
Sodium	**40700**		200	75.7	ug/L		09/05/18 02:47	09/11/18 19:29	2
Magnesium	**10500**		200	65.7	ug/L		09/05/18 02:47	09/11/18 19:29	2
Potassium	**4680**		200	64.9	ug/L		09/05/18 02:47	09/11/18 19:29	2
Calcium	**38600**		200	67.6	ug/L		09/05/18 02:47	09/11/18 19:29	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 02:47	09/11/18 19:29	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 02:47	09/11/18 19:29	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:41	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 10:36	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: PMB-02A-082718
Date Collected: 08/27/18 12:05
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-34
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 11:11	1
Bicarbonate Alkalinity as CaCO3	**122**		5.0	5.0	mg/L			08/30/18 19:00	1
Alkalinity	**122**		5.0	5.0	mg/L			08/30/18 19:00	1

Surrogate Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
460-163415-1	PMB-01-082718	84	117	86	83
460-163415-2	Dup-02-082718	83	107	86	87
460-163415-3	PMB-01A-082718	92	116	93	91
460-163415-3 MS	PMB-01A-082718	86	106	88	84
460-163415-3 MSD	PMB-01A-082718	87	111	88	86
460-163415-4	PMB-02-082718	85	108	87	86
460-163415-5	PAB-03-082718	87	107	87	87
460-163415-6	PAB-02-082718	85	108	88	85
460-163415-7	MRB-02-082718	96	121	95	96
460-163415-8	MRB-03-082718	85	111	86	87
460-163415-9	NOB-01-082718	95	117	95	91
460-163415-10	PAB-00-082718	87	119	88	81
460-163415-11	PAB-01-082718	89	111	88	86
460-163415-12	SW-11-082718	90	113	90	86
460-163415-13	Dup-01-082718	97	121	96	95
460-163415-14	PAB-01A-082718	87	111	88	85
460-163415-15	PMP-POND-082718	91	109	92	85
460-163415-16	SR3-POND-082718	87	125	94	85
460-163415-17	SR3-Seep-01-082718	85	122	87	80
460-163415-18	SR3-Seep-02-082718	89	118	89	82
460-163415-19	SW-3-082718	90	117	90	83
460-163415-20	MRB-01-082718	88	118	91	86
460-163415-21	MRB-00-082718	85	116	89	83
460-163415-22	TB-01-082718	85	117	88	84
460-163415-23	RC-03-082718	87	120	89	85
460-163415-24	SW-04-082718	88	118	91	83
460-163415-25	SW-17-082718	84	123	89	82
460-163415-26	SP-00-082718	85	116	89	83
460-163415-26 MS	SP-00-082718	91	120	87	84
460-163415-26 MSD	SP-00-082718	87	120	89	84
460-163415-27	SP-01-082718	88	123	89	85
460-163415-28	RC-02-082718	92	123	90	83
460-163415-29	RC-01-082718	88	117	88	85
460-163415-30	PAB-03A-082718	89	119	87	82
460-163415-31	PAB-04-082718	83	122	88	81
460-163415-32	NOB-02-082718	86	121	87	82
460-163415-33	RM-01-082718	93	123	93	88
460-163415-34	PMB-02A-082718	89	121	90	82
LCS 460-548531/4	Lab Control Sample	85	106	84	84
LCS 460-548838/3	Lab Control Sample	84	114	84	82
LCS 460-549013/3	Lab Control Sample	88	125	88	83
LCSD 460-549013/4	Lab Control Sample Dup	88	120	84	83
MB 460-548531/8	Method Blank	102	124	104	102
MB 460-548838/8	Method Blank	85	116	87	84
MB 460-549013/7	Method Blank	85	116	87	81

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene

Surrogate Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	BFB (70-130)						
460-163415-1	PMB-01-082718	93						
460-163415-2	Dup-02-082718	87						
460-163415-3	PMB-01A-082718	93						
460-163415-3 MS	PMB-01A-082718	88						
460-163415-3 MSD	PMB-01A-082718	90						
460-163415-4	PMB-02-082718	94						
460-163415-5	PAB-03-082718	95						
460-163415-6	PAB-02-082718	93						
460-163415-7	MRB-02-082718	93						
460-163415-8	MRB-03-082718	94						
460-163415-9	NOB-01-082718	92						
460-163415-10	PAB-00-082718	92						
460-163415-11	PAB-01-082718	92						
460-163415-12	SW-11-082718	89						
460-163415-13	Dup-01-082718	90						
460-163415-14	PAB-01A-082718	93						
460-163415-15	PMP-POND-082718	90						
460-163415-16	SR3-POND-082718	91						
460-163415-17	SR3-Seep-01-082718	91						
460-163415-18	SR3-Seep-02-082718	86						
460-163415-19	SW-3-082718	95						
460-163415-20	MRB-01-082718	99						
460-163415-21	MRB-00-082718	93						
460-163415-22	TB-01-082718	93						
460-163415-23	RC-03-082718	94						
460-163415-24	SW-04-082718	100						
460-163415-25	SW-17-082718	101						
460-163415-26	SP-00-082718	102						
460-163415-26 MS	SP-00-082718	102						
460-163415-26 MSD	SP-00-082718	98						
460-163415-27	SP-01-082718	100						
460-163415-28	RC-02-082718	99						
460-163415-29	RC-01-082718	93						
460-163415-30	PAB-03A-082718	94						
460-163415-31	PAB-04-082718	94						
460-163415-32	NOB-02-082718	93						
460-163415-33	RM-01-082718	92						
460-163415-34	PMB-02A-082718	93						
LCS 460-549340/4	Lab Control Sample	94						
LCS 460-550072/3	Lab Control Sample	93						
LCS 460-550785/4	Lab Control Sample	101						
LCSD 460-550072/4	Lab Control Sample Dup	94						
LCSD 460-550785/5	Lab Control Sample Dup	99						
MB 460-549340/9	Method Blank	95						
MB 460-550072/9	Method Blank	95						
MB 460-550785/8	Method Blank	99						

Surrogate Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Surrogate Legend

BFB = 4-Bromofluorobenzene

Isotope Dilution Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DXE (10-150)						
460-163415-1	PMB-01-082718	38						
460-163415-2	Dup-02-082718	34						
460-163415-3	PMB-01A-082718	37						
460-163415-3 MS	PMB-01A-082718	38						
460-163415-3 MSD	PMB-01A-082718	38						
460-163415-4	PMB-02-082718	36						
460-163415-5	PAB-03-082718	39						
460-163415-6	PAB-02-082718	38						
460-163415-7	MRB-02-082718	37						
460-163415-8	MRB-03-082718	39						
460-163415-9	NOB-01-082718	36						
460-163415-10	PAB-00-082718	44						
460-163415-11	PAB-01-082718	39						
460-163415-12	SW-11-082718	38						
460-163415-13	Dup-01-082718	41						
460-163415-14	PAB-01A-082718	39						
460-163415-15	PMP-POND-082718	38						
460-163415-16	SR3-POND-082718	36						
460-163415-17	SR3-Seep-01-082718	37						
460-163415-18	SR3-Seep-02-082718	40						
460-163415-19	SW-3-082718	40						
460-163415-20	MRB-01-082718	38						
460-163415-21	MRB-00-082718	35						
460-163415-23	RC-03-082718	31						
460-163415-24	SW-04-082718	37						
460-163415-25	SW-17-082718	34						
460-163415-26	SP-00-082718	39						
460-163415-26 MS	SP-00-082718	36						
460-163415-26 MSD	SP-00-082718	39						
460-163415-27	SP-01-082718	39						
460-163415-28	RC-02-082718	37						
460-163415-29	RC-01-082718	37						
460-163415-30	PAB-03A-082718	35						
460-163415-31	PAB-04-082718	33						
460-163415-32	NOB-02-082718	36						
460-163415-33	RM-01-082718	37						
460-163415-34	PMB-02A-082718	38						
MB 460-548292/1-A	Method Blank	31						
MB 460-548293/1-A	Method Blank	30						

Surrogate Legend

DXE = 1,4-Dioxane-d8

Isotope Dilution Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (10-200)							
LCS 460-548292/2-A	Lab Control Sample	32							
LCS 460-548293/2-A	Lab Control Sample	45							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-548531/8
Matrix: Water
Analysis Batch: 548531

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/30/18 09:33	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/30/18 09:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/30/18 09:33	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 09:33	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/30/18 09:33	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/30/18 09:33	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/30/18 09:33	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/30/18 09:33	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/30/18 09:33	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/30/18 09:33	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/30/18 09:33	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/30/18 09:33	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/30/18 09:33	1
2-Butanone (MEK)	3.53	J	5.0	1.9	ug/L			08/30/18 09:33	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/30/18 09:33	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/30/18 09:33	1
Acetone	13.2		5.0	5.0	ug/L			08/30/18 09:33	1
Benzene	0.43	U	1.0	0.43	ug/L			08/30/18 09:33	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/30/18 09:33	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/30/18 09:33	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/30/18 09:33	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/30/18 09:33	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/30/18 09:33	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/30/18 09:33	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/30/18 09:33	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/30/18 09:33	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/30/18 09:33	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/30/18 09:33	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/30/18 09:33	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/30/18 09:33	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/30/18 09:33	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/30/18 09:33	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/30/18 09:33	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/30/18 09:33	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/30/18 09:33	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/30/18 09:33	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/30/18 09:33	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/30/18 09:33	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/30/18 09:33	1
Styrene	0.42	U	1.0	0.42	ug/L			08/30/18 09:33	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/30/18 09:33	1
Toluene	0.38	U	1.0	0.38	ug/L			08/30/18 09:33	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/30/18 09:33	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/30/18 09:33	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/30/18 09:33	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/30/18 09:33	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/30/18 09:33	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/30/18 09:33	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/30/18 09:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		08/30/18 09:33	1
4-Bromofluorobenzene	124		70 - 130		08/30/18 09:33	1
Dibromofluoromethane (Surr)	104		70 - 130		08/30/18 09:33	1
Toluene-d8 (Surr)	102		70 - 130		08/30/18 09:33	1

Lab Sample ID: LCS 460-548531/4
Matrix: Water
Analysis Batch: 548531

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.8		ug/L		104	70 - 130
1,1,2,2-Tetrachloroethane	20.0	18.7		ug/L		93	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.3		ug/L		101	70 - 130
1,1,2-Trichloroethane	20.0	19.6		ug/L		98	70 - 130
1,1-Dichloroethane	20.0	20.3		ug/L		102	70 - 130
1,1-Dichloroethene	20.0	20.1		ug/L		100	70 - 130
1,2,3-Trichlorobenzene	20.0	21.0		ug/L		105	70 - 130
1,2,4-Trichlorobenzene	20.0	23.3		ug/L		117	70 - 130
1,2-Dichlorobenzene	20.0	19.6		ug/L		98	70 - 130
1,2-Dichloroethane	20.0	20.9		ug/L		105	70 - 130
1,2-Dichloropropane	20.0	22.5		ug/L		112	70 - 130
1,3-Dichlorobenzene	20.0	18.6		ug/L		93	70 - 130
1,4-Dichlorobenzene	20.0	18.9		ug/L		95	70 - 130
2-Butanone (MEK)	100	99.1		ug/L		99	40 - 160
2-Hexanone	100	103		ug/L		103	40 - 160
4-Methyl-2-pentanone (MIBK)	100	103		ug/L		103	40 - 160
Acetone	100	120		ug/L		120	40 - 160
Benzene	20.0	19.5		ug/L		97	70 - 130
Bromoform	20.0	13.4	*	ug/L		67	70 - 130
Bromomethane	20.0	24.6		ug/L		123	40 - 160
Carbon disulfide	20.0	17.6		ug/L		88	40 - 160
Carbon tetrachloride	20.0	20.2		ug/L		101	70 - 130
Chlorobenzene	20.0	19.4		ug/L		97	70 - 130
Chlorobromomethane	20.0	21.5		ug/L		108	70 - 130
Chlorodibromomethane	20.0	17.1		ug/L		86	70 - 130
Chloroethane	20.0	25.0		ug/L		125	40 - 160
Chloroform	20.0	20.1		ug/L		101	70 - 130
Chloromethane	20.0	19.7		ug/L		99	40 - 160
cis-1,2-Dichloroethene	20.0	19.8		ug/L		99	70 - 130
cis-1,3-Dichloropropene	20.0	17.8		ug/L		89	70 - 130
Cyclohexane	20.0	22.0		ug/L		110	70 - 130
Dichlorobromomethane	20.0	20.0		ug/L		100	70 - 130
Dichlorodifluoromethane	20.0	20.2		ug/L		101	40 - 160
Ethylbenzene	20.0	19.2		ug/L		96	70 - 130
Isopropylbenzene	20.0	20.6		ug/L		103	70 - 130
Methyl acetate	40.0	41.5		ug/L		104	70 - 130
Methyl tert-butyl ether	20.0	19.4		ug/L		97	70 - 130
Methylcyclohexane	20.0	23.9		ug/L		119	70 - 130
Methylene Chloride	20.0	19.1		ug/L		95	70 - 130

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

Lab Sample ID: LCS 460-548531/4
Matrix: Water
Analysis Batch: 548531

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	20.0	19.8		ug/L		99	70 - 130
Tetrachloroethene	20.0	20.3		ug/L		102	70 - 130
Toluene	20.0	19.4		ug/L		97	70 - 130
trans-1,2-Dichloroethene	20.0	19.8		ug/L		99	70 - 130
trans-1,3-Dichloropropene	20.0	18.1		ug/L		90	70 - 130
Trichloroethene	20.0	19.7		ug/L		98	70 - 130
Trichlorofluoromethane	20.0	19.4		ug/L		97	40 - 160
Vinyl chloride	20.0	19.7		ug/L		99	70 - 130
Xylenes, Total	40.0	39.2		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*
4-Bromofluorobenzene	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*84*		*70 - 130*
Toluene-d8 (Surr)	*84*		*70 - 130*

Lab Sample ID: 460-163415-3 MS
Matrix: Water
Analysis Batch: 548531

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.24	U	20.0	19.7		ug/L		99	70 - 130
1,1,2,2-Tetrachloroethane	0.37	U	20.0	17.9		ug/L		90	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	19.6		ug/L		98	70 - 130
1,1,2-Trichloroethane	0.43	U	20.0	18.3		ug/L		92	70 - 130
1,1-Dichloroethane	0.26	U	20.0	19.0		ug/L		95	70 - 130
1,1-Dichloroethene	0.12	U	20.0	18.5		ug/L		92	70 - 130
1,2,3-Trichlorobenzene	0.36	U	20.0	18.1		ug/L		90	70 - 130
1,2,4-Trichlorobenzene	0.37	U	20.0	19.4		ug/L		97	70 - 130
1,2-Dichlorobenzene	0.43	U	20.0	17.7		ug/L		89	70 - 130
1,2-Dichloroethane	0.43	U	20.0	19.9		ug/L		100	70 - 130
1,2-Dichloropropane	0.35	U	20.0	20.5		ug/L		102	70 - 130
1,3-Dichlorobenzene	0.34	U	20.0	16.7		ug/L		83	70 - 130
1,4-Dichlorobenzene	0.76	U	20.0	16.9		ug/L		84	70 - 130
2-Butanone (MEK)	2.2	J B	100	92.1		ug/L		90	40 - 160
2-Hexanone	2.9	U	100	95.5		ug/L		95	40 - 160
4-Methyl-2-pentanone (MIBK)	2.7	U	100	94.9		ug/L		95	40 - 160
Acetone	9.3	B	100	96.9		ug/L		88	40 - 160
Benzene	0.43	U	20.0	17.6		ug/L		88	70 - 130
Bromoform	0.54	U F1 *	20.0	13.1	F1	ug/L		65	70 - 130
Bromomethane	1.0	U	20.0	25.3		ug/L		127	40 - 160
Carbon disulfide	0.16	U	20.0	16.1		ug/L		80	40 - 160
Carbon tetrachloride	0.21	U	20.0	20.5		ug/L		102	70 - 130
Chlorobenzene	0.38	U	20.0	18.2		ug/L		91	70 - 130
Chlorobromomethane	0.41	U	20.0	19.8		ug/L		99	70 - 130
Chlorodibromomethane	0.28	U	20.0	15.7		ug/L		79	70 - 130
Chloroethane	0.32	U	20.0	23.8		ug/L		119	40 - 160

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

Lab Sample ID: 460-163415-3 MS
Matrix: Water
Analysis Batch: 548531

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	0.33	U	20.0	19.1		ug/L		96	70 - 130
Chloromethane	0.14	U	20.0	20.5		ug/L		102	40 - 160
cis-1,2-Dichloroethene	0.22	U	20.0	18.3		ug/L		92	70 - 130
cis-1,3-Dichloropropene	0.46	U	20.0	16.2		ug/L		81	70 - 130
Cyclohexane	0.32	U	20.0	20.6		ug/L		103	70 - 130
Dichlorobromomethane	0.34	U	20.0	18.6		ug/L		93	70 - 130
Dichlorodifluoromethane	0.12	U	20.0	20.6		ug/L		103	40 - 160
Ethylbenzene	0.30	U	20.0	17.6		ug/L		88	70 - 130
Isopropylbenzene	0.34	U	20.0	18.9		ug/L		94	70 - 130
Methyl acetate	0.31	U	40.0	40.7		ug/L		102	70 - 130
Methyl tert-butyl ether	0.47	U	20.0	18.4		ug/L		92	70 - 130
Methylcyclohexane	0.26	U	20.0	22.7		ug/L		114	70 - 130
Methylene Chloride	0.32	U	20.0	18.0		ug/L		90	70 - 130
Styrene	0.42	U	20.0	18.6		ug/L		93	70 - 130
Tetrachloroethene	0.25	U	20.0	19.3		ug/L		96	70 - 130
Toluene	0.38	U	20.0	17.2		ug/L		86	70 - 130
trans-1,2-Dichloroethene	0.24	U	20.0	18.1		ug/L		90	70 - 130
trans-1,3-Dichloropropene	0.49	U	20.0	16.7		ug/L		84	70 - 130
Trichloroethene	0.31	U	20.0	19.3		ug/L		96	70 - 130
Trichlorofluoromethane	0.14	U	20.0	21.8		ug/L		109	40 - 160
Vinyl chloride	0.17	U	20.0	19.9		ug/L		100	70 - 130
Xylenes, Total	0.65	U	40.0	36.6		ug/L		91	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*
4-Bromofluorobenzene	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*88*		*70 - 130*
Toluene-d8 (Surr)	*84*		*70 - 130*

Lab Sample ID: 460-163415-3 MSD
Matrix: Water
Analysis Batch: 548531

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.24	U	20.0	19.0		ug/L		95	70 - 130	4	20
1,1,2,2-Tetrachloroethane	0.37	U	20.0	17.8		ug/L		89	70 - 130	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	20.3		ug/L		102	70 - 130	4	20
1,1,2-Trichloroethane	0.43	U	20.0	17.4		ug/L		87	70 - 130	5	20
1,1-Dichloroethane	0.26	U	20.0	17.5		ug/L		87	70 - 130	8	20
1,1-Dichloroethene	0.12	U	20.0	18.0		ug/L		90	70 - 130	3	20
1,2,3-Trichlorobenzene	0.36	U	20.0	17.9		ug/L		89	70 - 130	1	20
1,2,4-Trichlorobenzene	0.37	U	20.0	18.9		ug/L		94	70 - 130	3	20
1,2-Dichlorobenzene	0.43	U	20.0	17.0		ug/L		85	70 - 130	4	20
1,2-Dichloroethane	0.43	U	20.0	18.3		ug/L		91	70 - 130	9	20
1,2-Dichloropropane	0.35	U	20.0	18.9		ug/L		95	70 - 130	8	20
1,3-Dichlorobenzene	0.34	U	20.0	16.3		ug/L		81	70 - 130	3	20
1,4-Dichlorobenzene	0.76	U	20.0	16.5		ug/L		83	70 - 130	2	20

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

Lab Sample ID: 460-163415-3 MSD
Matrix: Water
Analysis Batch: 548531

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Butanone (MEK)	2.2	J B	100	85.8		ug/L		84	40 - 160	7	20
2-Hexanone	2.9	U	100	92.2		ug/L		92	40 - 160	4	20
4-Methyl-2-pentanone (MIBK)	2.7	U	100	89.0		ug/L		89	40 - 160	7	20
Acetone	9.3	B	100	89.8		ug/L		80	40 - 160	8	20
Benzene	0.43	U	20.0	16.9		ug/L		84	70 - 130	4	20
Bromoform	0.54	U F1 *	20.0	13.4	F1	ug/L		67	70 - 130	2	20
Bromomethane	1.0	U	20.0	23.2		ug/L		116	40 - 160	9	20
Carbon disulfide	0.16	U	20.0	15.8		ug/L		79	40 - 160	2	20
Carbon tetrachloride	0.21	U	20.0	20.0		ug/L		100	70 - 130	2	20
Chlorobenzene	0.38	U	20.0	17.4		ug/L		87	70 - 130	5	20
Chlorobromomethane	0.41	U	20.0	17.6		ug/L		88	70 - 130	12	20
Chlorodibromomethane	0.28	U	20.0	15.4		ug/L		77	70 - 130	2	20
Chloroethane	0.32	U	20.0	22.1		ug/L		111	40 - 160	8	20
Chloroform	0.33	U	20.0	17.7		ug/L		88	70 - 130	8	20
Chloromethane	0.14	U	20.0	19.2		ug/L		96	40 - 160	6	20
cis-1,2-Dichloroethene	0.22	U	20.0	16.9		ug/L		84	70 - 130	8	20
cis-1,3-Dichloropropene	0.46	U	20.0	15.8		ug/L		79	70 - 130	2	20
Cyclohexane	0.32	U	20.0	21.4		ug/L		107	70 - 130	4	20
Dichlorobromomethane	0.34	U	20.0	17.3		ug/L		86	70 - 130	7	20
Dichlorodifluoromethane	0.12	U	20.0	21.1		ug/L		106	40 - 160	2	20
Ethylbenzene	0.30	U	20.0	17.2		ug/L		86	70 - 130	2	20
Isopropylbenzene	0.34	U	20.0	17.9		ug/L		89	70 - 130	6	20
Methyl acetate	0.31	U	40.0	38.6		ug/L		97	70 - 130	5	20
Methyl tert-butyl ether	0.47	U	20.0	17.4		ug/L		87	70 - 130	6	20
Methylcyclohexane	0.26	U	20.0	23.7		ug/L		119	70 - 130	4	20
Methylene Chloride	0.32	U	20.0	16.5		ug/L		83	70 - 130	9	20
Styrene	0.42	U	20.0	17.1		ug/L		86	70 - 130	8	20
Tetrachloroethene	0.25	U	20.0	19.2		ug/L		96	70 - 130	0	20
Toluene	0.38	U	20.0	17.0		ug/L		85	70 - 130	2	20
trans-1,2-Dichloroethene	0.24	U	20.0	17.4		ug/L		87	70 - 130	4	20
trans-1,3-Dichloropropene	0.49	U	20.0	16.2		ug/L		81	70 - 130	3	20
Trichloroethene	0.31	U	20.0	17.6		ug/L		88	70 - 130	9	20
Trichlorofluoromethane	0.14	U	20.0	21.1		ug/L		106	40 - 160	3	20
Vinyl chloride	0.17	U	20.0	19.2		ug/L		96	70 - 130	4	20
Xylenes, Total	0.65	U	40.0	34.8		ug/L		87	70 - 130	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*
4-Bromofluorobenzene	*111*		*70 - 130*
Dibromofluoromethane (Surr)	*88*		*70 - 130*
Toluene-d8 (Surr)	*86*		*70 - 130*

Lab Sample ID: MB 460-548838/8
Matrix: Water
Analysis Batch: 548838

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 08:03	1

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

Lab Sample ID: MB 460-548838/8
Matrix: Water
Analysis Batch: 548838

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 08:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 08:03	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 08:03	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 08:03	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 08:03	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 08:03	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 08:03	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 08:03	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 08:03	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 08:03	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 08:03	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 08:03	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 08:03	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 08:03	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 08:03	1
Acetone	5.0	U	5.0	5.0	ug/L			08/31/18 08:03	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 08:03	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/31/18 08:03	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 08:03	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 08:03	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 08:03	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 08:03	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 08:03	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 08:03	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 08:03	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 08:03	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 08:03	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 08:03	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 08:03	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 08:03	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 08:03	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 08:03	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 08:03	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 08:03	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 08:03	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 08:03	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 08:03	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 08:03	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 08:03	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 08:03	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 08:03	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 08:03	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 08:03	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 08:03	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 08:03	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 08:03	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 08:03	1

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

Lab Sample ID: MB 460-548838/8
Matrix: Water
Analysis Batch: 548838

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

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/31/18 08:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 130		08/31/18 08:03	1
4-Bromofluorobenzene	116		70 - 130		08/31/18 08:03	1
Dibromofluoromethane (Surr)	87		70 - 130		08/31/18 08:03	1
Toluene-d8 (Surr)	84		70 - 130		08/31/18 08:03	1

Lab Sample ID: LCS 460-548838/3
Matrix: Water
Analysis Batch: 548838

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	21.1		ug/L		106	70 - 130
1,1,2,2-Tetrachloroethane	20.0	18.3		ug/L		92	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.3		ug/L		101	70 - 130
1,1,2-Trichloroethane	20.0	19.3		ug/L		96	70 - 130
1,1-Dichloroethane	20.0	20.4		ug/L		102	70 - 130
1,1-Dichloroethene	20.0	20.5		ug/L		103	70 - 130
1,2,3-Trichlorobenzene	20.0	21.4		ug/L		107	70 - 130
1,2,4-Trichlorobenzene	20.0	21.0		ug/L		105	70 - 130
1,2-Dichlorobenzene	20.0	20.0		ug/L		100	70 - 130
1,2-Dichloroethane	20.0	20.9		ug/L		104	70 - 130
1,2-Dichloropropane	20.0	21.0		ug/L		105	70 - 130
1,3-Dichlorobenzene	20.0	18.4		ug/L		92	70 - 130
1,4-Dichlorobenzene	20.0	19.0		ug/L		95	70 - 130
2-Butanone (MEK)	100	101		ug/L		101	40 - 160
2-Hexanone	100	100		ug/L		100	40 - 160
4-Methyl-2-pentanone (MIBK)	100	103		ug/L		103	40 - 160
Acetone	100	105		ug/L		105	40 - 160
Benzene	20.0	18.9		ug/L		95	70 - 130
Bromoform	20.0	12.1	*	ug/L		61	70 - 130
Bromomethane	20.0	24.2		ug/L		121	40 - 160
Carbon disulfide	20.0	18.1		ug/L		91	40 - 160
Carbon tetrachloride	20.0	21.1		ug/L		106	70 - 130
Chlorobenzene	20.0	19.4		ug/L		97	70 - 130
Chlorobromomethane	20.0	21.4		ug/L		107	70 - 130
Chlorodibromomethane	20.0	15.9		ug/L		79	70 - 130
Chloroethane	20.0	22.5		ug/L		112	40 - 160
Chloroform	20.0	20.8		ug/L		104	70 - 130
Chloromethane	20.0	18.7		ug/L		94	40 - 160
cis-1,2-Dichloroethene	20.0	19.9		ug/L		99	70 - 130
cis-1,3-Dichloropropene	20.0	16.4		ug/L		82	70 - 130
Cyclohexane	20.0	20.4		ug/L		102	70 - 130
Dichlorobromomethane	20.0	19.6		ug/L		98	70 - 130
Dichlorodifluoromethane	20.0	18.0		ug/L		90	40 - 160
Ethylbenzene	20.0	19.1		ug/L		95	70 - 130

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

Lab Sample ID: LCS 460-548838/3
Matrix: Water
Analysis Batch: 548838

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	20.0	20.1		ug/L		100	70 - 130
Methyl acetate	40.0	40.1		ug/L		100	70 - 130
Methyl tert-butyl ether	20.0	19.4		ug/L		97	70 - 130
Methylcyclohexane	20.0	22.0		ug/L		110	70 - 130
Methylene Chloride	20.0	19.6		ug/L		98	70 - 130
Styrene	20.0	19.1		ug/L		96	70 - 130
Tetrachloroethene	20.0	20.5		ug/L		103	70 - 130
Toluene	20.0	19.2		ug/L		96	70 - 130
trans-1,2-Dichloroethene	20.0	20.4		ug/L		102	70 - 130
trans-1,3-Dichloropropene	20.0	16.2		ug/L		81	70 - 130
Trichloroethene	20.0	20.5		ug/L		102	70 - 130
Trichlorofluoromethane	20.0	18.8		ug/L		94	40 - 160
Vinyl chloride	20.0	18.5		ug/L		92	70 - 130
Xylenes, Total	40.0	40.1		ug/L		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*
4-Bromofluorobenzene	*114*		*70 - 130*
Dibromofluoromethane (Surr)	*84*		*70 - 130*
Toluene-d8 (Surr)	*82*		*70 - 130*

Lab Sample ID: 460-163415-26 MS
Matrix: Water
Analysis Batch: 548838

Client Sample ID: SP-00-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.24	U	20.0	20.7		ug/L		104	70 - 130
1,1,2,2-Tetrachloroethane	0.37	U	20.0	19.3		ug/L		97	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	20.2		ug/L		101	70 - 130
1,1,2-Trichloroethane	0.43	U	20.0	19.9		ug/L		100	70 - 130
1,1-Dichloroethane	0.26	U	20.0	19.9		ug/L		100	70 - 130
1,1-Dichloroethene	0.12	U	20.0	18.2		ug/L		91	70 - 130
1,2,3-Trichlorobenzene	0.36	U	20.0	20.8		ug/L		104	70 - 130
1,2,4-Trichlorobenzene	0.37	U	20.0	21.1		ug/L		105	70 - 130
1,2-Dichlorobenzene	0.43	U	20.0	19.4		ug/L		97	70 - 130
1,2-Dichloroethane	0.43	U	20.0	21.8		ug/L		109	70 - 130
1,2-Dichloropropane	0.35	U	20.0	21.6		ug/L		108	70 - 130
1,3-Dichlorobenzene	0.34	U	20.0	18.6		ug/L		93	70 - 130
1,4-Dichlorobenzene	0.76	U	20.0	18.8		ug/L		94	70 - 130
2-Butanone (MEK)	1.9	U	100	97.5		ug/L		97	40 - 160
2-Hexanone	2.9	U	100	105		ug/L		105	40 - 160
4-Methyl-2-pentanone (MIBK)	2.7	U	100	102		ug/L		102	40 - 160
Acetone	11		100	100		ug/L		90	40 - 160
Benzene	0.43	U	20.0	18.8		ug/L		94	70 - 130
Bromoform	0.54	U *	20.0	14.3		ug/L		72	70 - 130
Bromomethane	1.0	U	20.0	22.5		ug/L		112	40 - 160
Carbon disulfide	0.16	U	20.0	16.5		ug/L		82	40 - 160

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

Lab Sample ID: 460-163415-26 MS
Matrix: Water
Analysis Batch: 548838

Client Sample ID: SP-00-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	0.21	U	20.0	21.2		ug/L		106	70 - 130
Chlorobenzene	0.38	U	20.0	19.3		ug/L		97	70 - 130
Chlorobromomethane	0.41	U	20.0	21.2		ug/L		106	70 - 130
Chlorodibromomethane	0.28	U	20.0	18.0		ug/L		90	70 - 130
Chloroethane	0.32	U	20.0	24.0		ug/L		120	40 - 160
Chloroform	0.33	U	20.0	21.0		ug/L		105	70 - 130
Chloromethane	0.14	U	20.0	18.9		ug/L		94	40 - 160
cis-1,2-Dichloroethene	0.22	U	20.0	20.0		ug/L		100	70 - 130
cis-1,3-Dichloropropene	0.46	U	20.0	18.0		ug/L		90	70 - 130
Cyclohexane	0.32	U	20.0	20.1		ug/L		100	70 - 130
Dichlorobromomethane	0.34	U	20.0	20.2		ug/L		101	70 - 130
Dichlorodifluoromethane	0.12	U	20.0	19.8		ug/L		99	40 - 160
Ethylbenzene	0.30	U	20.0	18.3		ug/L		91	70 - 130
Isopropylbenzene	0.34	U	20.0	19.3		ug/L		96	70 - 130
Methyl acetate	0.31	U	40.0	44.6		ug/L		111	70 - 130
Methyl tert-butyl ether	0.47	U	20.0	19.8		ug/L		99	70 - 130
Methylcyclohexane	0.26	U	20.0	21.3		ug/L		107	70 - 130
Methylene Chloride	0.32	U	20.0	18.6		ug/L		93	70 - 130
Styrene	0.42	U	20.0	18.5		ug/L		93	70 - 130
Tetrachloroethene	0.25	U	20.0	19.9		ug/L		100	70 - 130
Toluene	0.38	U	20.0	18.4		ug/L		92	70 - 130
trans-1,2-Dichloroethene	0.24	U	20.0	18.5		ug/L		92	70 - 130
trans-1,3-Dichloropropene	0.49	U	20.0	18.4		ug/L		92	70 - 130
Trichloroethene	0.31	U	20.0	20.0		ug/L		100	70 - 130
Trichlorofluoromethane	0.14	U	20.0	19.9		ug/L		100	40 - 160
Vinyl chloride	0.17	U	20.0	17.8		ug/L		89	70 - 130
Xylenes, Total	0.65	U	40.0	37.8		ug/L		95	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene	*120*		*70 - 130*
Dibromofluoromethane (Surr)	*87*		*70 - 130*
Toluene-d8 (Surr)	*84*		*70 - 130*

Lab Sample ID: 460-163415-26 MSD
Matrix: Water
Analysis Batch: 548838

Client Sample ID: SP-00-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.24	U	20.0	19.9		ug/L		99	70 - 130	4	20
1,1,2,2-Tetrachloroethane	0.37	U	20.0	17.8		ug/L		89	70 - 130	8	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	19.4		ug/L		97	70 - 130	4	20
1,1,2-Trichloroethane	0.43	U	20.0	18.9		ug/L		95	70 - 130	5	20
1,1-Dichloroethane	0.26	U	20.0	19.1		ug/L		96	70 - 130	4	20
1,1-Dichloroethene	0.12	U	20.0	18.6		ug/L		93	70 - 130	2	20
1,2,3-Trichlorobenzene	0.36	U	20.0	20.1		ug/L		100	70 - 130	3	20
1,2,4-Trichlorobenzene	0.37	U	20.0	19.4		ug/L		97	70 - 130	8	20

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

Lab Sample ID: 460-163415-26 MSD
Matrix: Water
Analysis Batch: 548838

Client Sample ID: SP-00-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	0.43	U	20.0	18.4		ug/L		92	70 - 130	5	20
1,2-Dichloroethane	0.43	U	20.0	21.0		ug/L		105	70 - 130	4	20
1,2-Dichloropropane	0.35	U	20.0	21.3		ug/L		106	70 - 130	1	20
1,3-Dichlorobenzene	0.34	U	20.0	18.0		ug/L		90	70 - 130	3	20
1,4-Dichlorobenzene	0.76	U	20.0	17.6		ug/L		88	70 - 130	6	20
2-Butanone (MEK)	1.9	U	100	94.4		ug/L		94	40 - 160	3	20
2-Hexanone	2.9	U	100	105		ug/L		105	40 - 160	1	20
4-Methyl-2-pentanone (MIBK)	2.7	U	100	101		ug/L		101	40 - 160	2	20
Acetone	11		100	101		ug/L		91	40 - 160	1	20
Benzene	0.43	U	20.0	18.0		ug/L		90	70 - 130	4	20
Bromoform	0.54	U *	20.0	13.9		ug/L		70	70 - 130	3	20
Bromomethane	1.0	U	20.0	22.8		ug/L		114	40 - 160	2	20
Carbon disulfide	0.16	U	20.0	16.1		ug/L		80	40 - 160	3	20
Carbon tetrachloride	0.21	U	20.0	20.5		ug/L		102	70 - 130	3	20
Chlorobenzene	0.38	U	20.0	18.3		ug/L		92	70 - 130	5	20
Chlorobromomethane	0.41	U	20.0	20.6		ug/L		103	70 - 130	3	20
Chlorodibromomethane	0.28	U	20.0	17.4		ug/L		87	70 - 130	3	20
Chloroethane	0.32	U	20.0	23.3		ug/L		117	40 - 160	3	20
Chloroform	0.33	U	20.0	19.7		ug/L		98	70 - 130	6	20
Chloromethane	0.14	U	20.0	18.6		ug/L		93	40 - 160	1	20
cis-1,2-Dichloroethene	0.22	U	20.0	19.2		ug/L		96	70 - 130	4	20
cis-1,3-Dichloropropene	0.46	U	20.0	16.9		ug/L		85	70 - 130	6	20
Cyclohexane	0.32	U	20.0	19.3		ug/L		96	70 - 130	4	20
Dichlorobromomethane	0.34	U	20.0	19.6		ug/L		98	70 - 130	3	20
Dichlorodifluoromethane	0.12	U	20.0	19.0		ug/L		95	40 - 160	4	20
Ethylbenzene	0.30	U	20.0	18.0		ug/L		90	70 - 130	1	20
Isopropylbenzene	0.34	U	20.0	18.7		ug/L		93	70 - 130	3	20
Methyl acetate	0.31	U	40.0	42.1		ug/L		105	70 - 130	6	20
Methyl tert-butyl ether	0.47	U	20.0	19.5		ug/L		97	70 - 130	2	20
Methylcyclohexane	0.26	U	20.0	21.1		ug/L		106	70 - 130	1	20
Methylene Chloride	0.32	U	20.0	18.5		ug/L		93	70 - 130	0	20
Styrene	0.42	U	20.0	18.8		ug/L		94	70 - 130	1	20
Tetrachloroethene	0.25	U	20.0	18.9		ug/L		95	70 - 130	5	20
Toluene	0.38	U	20.0	17.8		ug/L		89	70 - 130	3	20
trans-1,2-Dichloroethene	0.24	U	20.0	18.0		ug/L		90	70 - 130	3	20
trans-1,3-Dichloropropene	0.49	U	20.0	17.5		ug/L		88	70 - 130	5	20
Trichloroethene	0.31	U	20.0	18.3		ug/L		91	70 - 130	9	20
Trichlorofluoromethane	0.14	U	20.0	19.6		ug/L		98	40 - 160	1	20
Vinyl chloride	0.17	U	20.0	17.6		ug/L		88	70 - 130	1	20
Xylenes, Total	0.65	U	40.0	36.6		ug/L		91	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*
4-Bromofluorobenzene	*120*		*70 - 130*
Dibromofluoromethane (Surr)	*89*		*70 - 130*
Toluene-d8 (Surr)	*84*		*70 - 130*

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

Lab Sample ID: MB 460-549013/7
Matrix: Water
Analysis Batch: 549013

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			08/31/18 23:32	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			08/31/18 23:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			08/31/18 23:32	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 23:32	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			08/31/18 23:32	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			08/31/18 23:32	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			08/31/18 23:32	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			08/31/18 23:32	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			08/31/18 23:32	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			08/31/18 23:32	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			08/31/18 23:32	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			08/31/18 23:32	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			08/31/18 23:32	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			08/31/18 23:32	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			08/31/18 23:32	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			08/31/18 23:32	1
Acetone	5.0	U	5.0	5.0	ug/L			08/31/18 23:32	1
Benzene	0.43	U	1.0	0.43	ug/L			08/31/18 23:32	1
Bromoform	0.54	U	1.0	0.54	ug/L			08/31/18 23:32	1
Bromomethane	1.0	U	1.0	1.0	ug/L			08/31/18 23:32	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			08/31/18 23:32	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			08/31/18 23:32	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			08/31/18 23:32	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			08/31/18 23:32	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			08/31/18 23:32	1
Chloroethane	0.32	U	1.0	0.32	ug/L			08/31/18 23:32	1
Chloroform	0.33	U	1.0	0.33	ug/L			08/31/18 23:32	1
Chloromethane	0.14	U	1.0	0.14	ug/L			08/31/18 23:32	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			08/31/18 23:32	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			08/31/18 23:32	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			08/31/18 23:32	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			08/31/18 23:32	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			08/31/18 23:32	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			08/31/18 23:32	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			08/31/18 23:32	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			08/31/18 23:32	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			08/31/18 23:32	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			08/31/18 23:32	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			08/31/18 23:32	1
Styrene	0.42	U	1.0	0.42	ug/L			08/31/18 23:32	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			08/31/18 23:32	1
Toluene	0.38	U	1.0	0.38	ug/L			08/31/18 23:32	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			08/31/18 23:32	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			08/31/18 23:32	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			08/31/18 23:32	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			08/31/18 23:32	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			08/31/18 23:32	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			08/31/18 23:32	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/31/18 23:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 130		08/31/18 23:32	1
4-Bromofluorobenzene	116		70 - 130		08/31/18 23:32	1
Dibromofluoromethane (Surr)	87		70 - 130		08/31/18 23:32	1
Toluene-d8 (Surr)	81		70 - 130		08/31/18 23:32	1

Lab Sample ID: LCS 460-549013/3
Matrix: Water
Analysis Batch: 549013

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.7		ug/L		104	70 - 130
1,1,2,2-Tetrachloroethane	20.0	16.4		ug/L		82	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	19.4		ug/L		97	70 - 130
1,1,2-Trichloroethane	20.0	17.6		ug/L		88	70 - 130
1,1-Dichloroethane	20.0	18.7		ug/L		94	70 - 130
1,1-Dichloroethene	20.0	18.5		ug/L		92	70 - 130
1,2,3-Trichlorobenzene	20.0	18.7		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	20.0	19.9		ug/L		99	70 - 130
1,2-Dichlorobenzene	20.0	18.0		ug/L		90	70 - 130
1,2-Dichloroethane	20.0	20.2		ug/L		101	70 - 130
1,2-Dichloropropane	20.0	20.0		ug/L		100	70 - 130
1,3-Dichlorobenzene	20.0	17.5		ug/L		88	70 - 130
1,4-Dichlorobenzene	20.0	17.7		ug/L		89	70 - 130
2-Butanone (MEK)	100	84.8		ug/L		85	40 - 160
2-Hexanone	100	92.5		ug/L		93	40 - 160
4-Methyl-2-pentanone (MIBK)	100	93.2		ug/L		93	40 - 160
Acetone	100	97.1		ug/L		97	40 - 160
Benzene	20.0	17.1		ug/L		85	70 - 130
Bromoform	20.0	14.7		ug/L		73	70 - 130
Bromomethane	20.0	19.2		ug/L		96	40 - 160
Carbon disulfide	20.0	16.6		ug/L		83	40 - 160
Carbon tetrachloride	20.0	20.9		ug/L		104	70 - 130
Chlorobenzene	20.0	18.6		ug/L		93	70 - 130
Chlorobromomethane	20.0	19.1		ug/L		96	70 - 130
Chlorodibromomethane	20.0	16.2		ug/L		81	70 - 130
Chloroethane	20.0	19.4		ug/L		97	40 - 160
Chloroform	20.0	19.1		ug/L		95	70 - 130
Chloromethane	20.0	16.8		ug/L		84	40 - 160
cis-1,2-Dichloroethene	20.0	17.9		ug/L		90	70 - 130
cis-1,3-Dichloropropene	20.0	16.2		ug/L		81	70 - 130
Cyclohexane	20.0	19.4		ug/L		97	70 - 130
Dichlorobromomethane	20.0	18.7		ug/L		93	70 - 130
Dichlorodifluoromethane	20.0	18.0		ug/L		90	40 - 160
Ethylbenzene	20.0	17.8		ug/L		89	70 - 130
Isopropylbenzene	20.0	18.4		ug/L		92	70 - 130
Methyl acetate	40.0	39.8		ug/L		100	70 - 130
Methyl tert-butyl ether	20.0	18.0		ug/L		90	70 - 130
Methylcyclohexane	20.0	20.8		ug/L		104	70 - 130
Methylene Chloride	20.0	18.0		ug/L		90	70 - 130

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

Lab Sample ID: LCS 460-549013/3
Matrix: Water
Analysis Batch: 549013

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Styrene			20.0	18.0		ug/L		90	70 - 130		
Tetrachloroethene			20.0	19.7		ug/L		99	70 - 130		
Toluene			20.0	17.2		ug/L		86	70 - 130		
trans-1,2-Dichloroethene			20.0	18.4		ug/L		92	70 - 130		
trans-1,3-Dichloropropene			20.0	17.2		ug/L		86	70 - 130		
Trichloroethene			20.0	19.5		ug/L		97	70 - 130		
Trichlorofluoromethane			20.0	17.7		ug/L		88	40 - 160		
Vinyl chloride			20.0	16.0		ug/L		80	70 - 130		
Xylenes, Total			40.0	36.5		ug/L		91	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
4-Bromofluorobenzene	*125*		*70 - 130*
Dibromofluoromethane (Surr)	*88*		*70 - 130*
Toluene-d8 (Surr)	*83*		*70 - 130*

Lab Sample ID: LCSD 460-549013/4
Matrix: Water
Analysis Batch: 549013

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	22.0		ug/L		110	70 - 130	6	20
1,1,2,2-Tetrachloroethane			20.0	17.3		ug/L		86	70 - 130	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane			20.0	20.5		ug/L		103	70 - 130	6	20
1,1,2-Trichloroethane			20.0	19.4		ug/L		97	70 - 130	10	20
1,1-Dichloroethane			20.0	20.2		ug/L		101	70 - 130	7	20
1,1-Dichloroethene			20.0	18.8		ug/L		94	70 - 130	2	20
1,2,3-Trichlorobenzene			20.0	20.7		ug/L		104	70 - 130	10	20
1,2,4-Trichlorobenzene			20.0	21.6		ug/L		108	70 - 130	8	20
1,2-Dichlorobenzene			20.0	19.3		ug/L		96	70 - 130	7	20
1,2-Dichloroethane			20.0	21.2		ug/L		106	70 - 130	5	20
1,2-Dichloropropane			20.0	22.1		ug/L		110	70 - 130	10	20
1,3-Dichlorobenzene			20.0	18.7		ug/L		94	70 - 130	7	20
1,4-Dichlorobenzene			20.0	18.5		ug/L		92	70 - 130	4	20
2-Butanone (MEK)			100	92.2		ug/L		92	40 - 160	8	20
2-Hexanone			100	96.7		ug/L		97	40 - 160	4	20
4-Methyl-2-pentanone (MIBK)			100	97.5		ug/L		98	40 - 160	5	20
Acetone			100	101		ug/L		101	40 - 160	4	20
Benzene			20.0	18.8		ug/L		94	70 - 130	9	20
Bromoform			20.0	14.5		ug/L		73	70 - 130	1	20
Bromomethane			20.0	21.0		ug/L		105	40 - 160	9	20
Carbon disulfide			20.0	17.4		ug/L		87	40 - 160	5	20
Carbon tetrachloride			20.0	21.7		ug/L		108	70 - 130	4	20
Chlorobenzene			20.0	19.1		ug/L		95	70 - 130	3	20
Chlorobromomethane			20.0	21.5		ug/L		108	70 - 130	12	20
Chlorodibromomethane			20.0	17.5		ug/L		87	70 - 130	7	20
Chloroethane			20.0	20.7		ug/L		104	40 - 160	7	20

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

Lab Sample ID: LCSD 460-549013/4
Matrix: Water
Analysis Batch: 549013

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroform			20.0	20.9		ug/L		105	70 - 130	9	20
Chloromethane			20.0	18.0		ug/L		90	40 - 160	7	20
cis-1,2-Dichloroethene			20.0	19.5		ug/L		97	70 - 130	8	20
cis-1,3-Dichloropropene			20.0	18.7		ug/L		94	70 - 130	14	20
Cyclohexane			20.0	20.4		ug/L		102	70 - 130	5	20
Dichlorobromomethane			20.0	20.5		ug/L		103	70 - 130	9	20
Dichlorodifluoromethane			20.0	18.1		ug/L		91	40 - 160	0	20
Ethylbenzene			20.0	18.8		ug/L		94	70 - 130	6	20
Isopropylbenzene			20.0	19.8		ug/L		99	70 - 130	7	20
Methyl acetate			40.0	40.4		ug/L		101	70 - 130	1	20
Methyl tert-butyl ether			20.0	19.9		ug/L		99	70 - 130	10	20
Methylcyclohexane			20.0	22.2		ug/L		111	70 - 130	6	20
Methylene Chloride			20.0	19.1		ug/L		96	70 - 130	6	20
Styrene			20.0	19.1		ug/L		96	70 - 130	6	20
Tetrachloroethene			20.0	21.0		ug/L		105	70 - 130	6	20
Toluene			20.0	19.0		ug/L		95	70 - 130	10	20
trans-1,2-Dichloroethene			20.0	18.9		ug/L		94	70 - 130	3	20
trans-1,3-Dichloropropene			20.0	18.4		ug/L		92	70 - 130	7	20
Trichloroethene			20.0	20.0		ug/L		100	70 - 130	3	20
Trichlorofluoromethane			20.0	18.3		ug/L		91	40 - 160	3	20
Vinyl chloride			20.0	16.3		ug/L		81	70 - 130	2	20
Xylenes, Total			40.0	37.7		ug/L		94	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
4-Bromofluorobenzene	*120*		*70 - 130*
Dibromofluoromethane (Surr)	*84*		*70 - 130*
Toluene-d8 (Surr)	*83*		*70 - 130*

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

Lab Sample ID: MB 460-549340/9
Matrix: Water
Analysis Batch: 549340

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 11:38	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 11:38	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/02/18 11:38*	*1*

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

Lab Sample ID: LCS 460-549340/4
Matrix: Water
Analysis Batch: 549340

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.0500	0.0412		ug/L		82	40 - 160
Ethylene Dibromide	0.0500	0.0472		ug/L		94	70 - 130
1,2,3-Trichloropropane	0.0500	0.0490		ug/L		98	40 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*70 - 130*

Lab Sample ID: 460-163415-3 MS
Matrix: Water
Analysis Batch: 549340

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.0040	U	0.0500	0.0473		ug/L		95	40 - 160
Ethylene Dibromide	0.0010	U	0.0500	0.0518		ug/L		104	70 - 130
1,2,3-Trichloropropane	0.0030	U	0.0500	0.0570		ug/L		114	40 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*88*		*70 - 130*

Lab Sample ID: 460-163415-3 MSD
Matrix: Water
Analysis Batch: 549340

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.0040	U	0.0500	0.0495		ug/L		99	40 - 160	4	20
Ethylene Dibromide	0.0010	U	0.0500	0.0516		ug/L		103	70 - 130	0	20
1,2,3-Trichloropropane	0.0030	U	0.0500	0.0573		ug/L		115	40 - 160	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*70 - 130*

Lab Sample ID: MB 460-550072/9
Matrix: Water
Analysis Batch: 550072

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/06/18 14:20	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/06/18 14:20	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/06/18 14:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/06/18 14:20*	*1*

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

Lab Sample ID: LCS 460-550072/3
Matrix: Water
Analysis Batch: 550072

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.0500	0.0497		ug/L		99	40 - 160		
Ethylene Dibromide			0.0500	0.0522		ug/L		104	70 - 130		
1,2,3-Trichloropropane			0.0500	0.0596		ug/L		119	40 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*70 - 130*

Lab Sample ID: LCSD 460-550072/4
Matrix: Water
Analysis Batch: 550072

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.0500	0.0553		ug/L		111	40 - 160	11	20
Ethylene Dibromide			0.0500	0.0515		ug/L		103	70 - 130	1	20
1,2,3-Trichloropropane			0.0500	0.0578		ug/L		116	40 - 160	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*70 - 130*

Lab Sample ID: MB 460-550785/8
Matrix: Water
Analysis Batch: 550785

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/09/18 21:27	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/09/18 21:27	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/09/18 21:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*09/09/18 21:27*	*1*

Lab Sample ID: LCS 460-550785/4
Matrix: Water
Analysis Batch: 550785

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.0500	0.0528		ug/L		106	40 - 160		
Ethylene Dibromide			0.0500	0.0523		ug/L		105	70 - 130		
1,2,3-Trichloropropane			0.0500	0.0523		ug/L		105	40 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*70 - 130*

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

Lab Sample ID: LCSD 460-550785/5
Matrix: Water
Analysis Batch: 550785

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.0500	0.0515		ug/L		103	40 - 160	2	20
Ethylene Dibromide	0.0500	0.0514		ug/L		103	70 - 130	2	20
1,2,3-Trichloropropane	0.0500	0.0531		ug/L		106	40 - 160	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*70 - 130*

Lab Sample ID: 460-163415-26 MS
Matrix: Water
Analysis Batch: 550785

Client Sample ID: SP-00-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.0040	U	0.0500	0.0459		ug/L		92	40 - 160
Ethylene Dibromide	0.0010	U	0.0500	0.0508		ug/L		102	70 - 130
1,2,3-Trichloropropane	0.0030	U	0.0500	0.0536		ug/L		107	40 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*70 - 130*

Lab Sample ID: 460-163415-26 MSD
Matrix: Water
Analysis Batch: 550785

Client Sample ID: SP-00-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.0040	U	0.0500	0.0477		ug/L		95	40 - 160	4	20
Ethylene Dibromide	0.0010	U	0.0500	0.0546		ug/L		109	70 - 130	7	20
1,2,3-Trichloropropane	0.0030	U	0.0500	0.0543		ug/L		109	40 - 160	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 130*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 460-548292/1-A
Matrix: Water
Analysis Batch: 548453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:05	08/29/18 22:32	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*31*		*10 - 150*	*08/29/18 09:05*	*08/29/18 22:32*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: LCS 460-548292/2-A
Matrix: Water
Analysis Batch: 548453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548292

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			1.60	2.05		ug/L		128	10 - 200		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*32*		*10 - 200*

Lab Sample ID: 460-163415-3 MS
Matrix: Water
Analysis Batch: 548453

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA
Prep Batch: 548292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	0.016	U	1.60	1.78		ug/L		111	70 - 130		

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*38*		*10 - 150*

Lab Sample ID: 460-163415-3 MSD
Matrix: Water
Analysis Batch: 548453

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA
Prep Batch: 548292

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.016	U	1.60	1.79		ug/L		112	70 - 130	1	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*38*		*10 - 150*

Lab Sample ID: MB 460-548293/1-A
Matrix: Water
Analysis Batch: 548453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548293

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/29/18 09:12	08/30/18 05:40	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*30*		*10 - 150*	*08/29/18 09:12*	*08/30/18 05:40*	*1*

Lab Sample ID: LCS 460-548293/2-A
Matrix: Water
Analysis Batch: 548453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548293

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			1.60	1.37		ug/L		86	10 - 200		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*45*		*10 - 200*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: 460-163415-26 MS
Matrix: Water
Analysis Batch: 548453

Client Sample ID: SP-00-082718
Prep Type: Total/NA
Prep Batch: 548293

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.016	U	1.60	1.81		ug/L		113	70 - 130

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*36*		*10 - 150*

Lab Sample ID: 460-163415-26 MSD
Matrix: Water
Analysis Batch: 548453

Client Sample ID: SP-00-082718
Prep Type: Total/NA
Prep Batch: 548293

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.016	U	1.60	1.77		ug/L		110	70 - 130	2	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*39*		*10 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 460-548204/3
Matrix: Water
Analysis Batch: 548204

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/29/18 15:58	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/29/18 15:58	1

Lab Sample ID: LCS 460-548204/5
Matrix: Water
Analysis Batch: 548204

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.516		mg/L		101	90 - 110
Sulfate	7.50	7.138		mg/L		95	90 - 110

Lab Sample ID: LCSD 460-548204/6
Matrix: Water
Analysis Batch: 548204

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.50	1.423		mg/L		95	90 - 110	6	15
Sulfate	7.50	7.126		mg/L		95	90 - 110	0	15

Lab Sample ID: 460-163415-3 MS
Matrix: Water
Analysis Batch: 548204

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1.83		7.50	9.164		mg/L		98	90 - 110

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 460-163415-3 MSD
Matrix: Water
Analysis Batch: 548204

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1.83		7.50	9.169		mg/L		98	90 - 110	0	15

Lab Sample ID: 460-163415-11 MS
Matrix: Water
Analysis Batch: 548204

Client Sample ID: PAB-01-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.70		1.50	3.346		mg/L		110	90 - 110
Sulfate	4.21		7.50	11.87		mg/L		102	90 - 110

Lab Sample ID: 460-163415-11 MSD
Matrix: Water
Analysis Batch: 548204

Client Sample ID: PAB-01-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.70		1.50	3.341		mg/L		109	90 - 110	0	15
Sulfate	4.21		7.50	11.83		mg/L		102	90 - 110	0	15

Lab Sample ID: 460-163415-3 DU
Matrix: Water
Analysis Batch: 548204

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	1.83		1.807		mg/L		1	15

Lab Sample ID: 460-163415-11 DU
Matrix: Water
Analysis Batch: 548204

Client Sample ID: PAB-01-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	1.70		1.691		mg/L		0.7	15
Sulfate	4.21		4.197		mg/L		0.2	15

Lab Sample ID: MB 460-548207/3
Matrix: Water
Analysis Batch: 548207

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/30/18 13:58	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/30/18 13:58	1

Lab Sample ID: LCS 460-548207/5
Matrix: Water
Analysis Batch: 548207

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.389		mg/L		93	90 - 110
Sulfate	7.50	7.009		mg/L		93	90 - 110

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 460-548207/6
Matrix: Water
Analysis Batch: 548207

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			1.50	1.391		mg/L		93	90 - 110	0	15
Sulfate			7.50	6.998		mg/L		93	90 - 110	0	15

Lab Sample ID: 460-163415-26 MS
Matrix: Water
Analysis Batch: 548207

Client Sample ID: SP-00-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	4.58		0.375	12.12	4	mg/L		2010	90 - 110

Lab Sample ID: 460-163415-26 MSD
Matrix: Water
Analysis Batch: 548207

Client Sample ID: SP-00-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	4.58		0.375	12.30	4	mg/L		2057	90 - 110	1	15

Lab Sample ID: 460-163415-32 MS
Matrix: Water
Analysis Batch: 548207

Client Sample ID: NOB-02-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.65		0.0750	3.205	4	mg/L		2078	90 - 110
Sulfate	3.95		0.375	11.44	4	mg/L		1997	90 - 110

Lab Sample ID: 460-163415-32 MSD
Matrix: Water
Analysis Batch: 548207

Client Sample ID: NOB-02-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.65		0.0750	3.093	4	mg/L		1930	90 - 110	4	15
Sulfate	3.95		0.375	11.41	4	mg/L		1990	90 - 110	0	15

Lab Sample ID: 460-163415-26 DU
Matrix: Water
Analysis Batch: 548207

Client Sample ID: SP-00-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	4.58		4.612		mg/L		0.7	15

Lab Sample ID: 460-163415-32 DU
Matrix: Water
Analysis Batch: 548207

Client Sample ID: NOB-02-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	1.65		1.635		mg/L		0.7	15
Sulfate	3.95		3.738		mg/L		5	15

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 460-548646/3
Matrix: Water
Analysis Batch: 548646

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/30/18 14:01	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/30/18 14:01	1

Lab Sample ID: LCS 460-548646/5
Matrix: Water
Analysis Batch: 548646

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.420		mg/L		95	90 - 110
Sulfate	7.50	7.377		mg/L		98	90 - 110

Lab Sample ID: LCSD 460-548646/6
Matrix: Water
Analysis Batch: 548646

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.50	1.436		mg/L		96	90 - 110	1	15
Sulfate	7.50	7.412		mg/L		99	90 - 110	0	15

Lab Sample ID: MB 460-549036/3
Matrix: Water
Analysis Batch: 549036

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/31/18 18:54	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/31/18 18:54	1

Lab Sample ID: LCS 460-549036/5
Matrix: Water
Analysis Batch: 549036

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.405		mg/L		94	90 - 110
Sulfate	7.50	7.306		mg/L		97	90 - 110

Lab Sample ID: LCSD 460-549036/6
Matrix: Water
Analysis Batch: 549036

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.50	1.435		mg/L		96	90 - 110	2	15
Sulfate	7.50	7.428		mg/L		99	90 - 110	2	15

Method: 9056A - Anions, Ion Chromatography - DL

Lab Sample ID: 460-163415-3 DU
Matrix: Water
Analysis Batch: 548646

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	50.7	D	52.21		mg/L		3	15

Lab Sample ID: 460-163415-26 MS
Matrix: Water
Analysis Batch: 549036

Client Sample ID: SP-00-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL	22.1	D	0.0750	21.99	4	mg/L		-182	90 - 110

Lab Sample ID: 460-163415-26 MSD
Matrix: Water
Analysis Batch: 549036

Client Sample ID: SP-00-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride - DL	22.1	D	0.0750	21.63	4	mg/L		-673	90 - 110	2	15

Lab Sample ID: 460-163415-26 DU
Matrix: Water
Analysis Batch: 549036

Client Sample ID: SP-00-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	22.1	D	21.18		mg/L		4	15
Sulfate - DL	3.32	U	3.32	U	mg/L		NC	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: LCS 460-549692/2-A
Matrix: Water
Analysis Batch: 549568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.00	4.76		ug/L		95	80 - 120
Arsenic	10.0	10.04		ug/L		100	80 - 120
Barium	10.0	9.70		ug/L		97	80 - 120
Beryllium	5.00	5.95		ug/L		119	80 - 120
Cadmium	5.00	5.20		ug/L		104	80 - 120
Cobalt	5.00	5.05		ug/L		101	80 - 120
Chromium	10.0	10.04		ug/L		100	80 - 120
Copper	10.0	10.20		ug/L		102	80 - 120
Manganese	50.0	49.67		ug/L		99	80 - 120
Nickel	10.0	10.03		ug/L		100	80 - 120
Lead	5.00	5.03		ug/L		101	80 - 120
Antimony	5.00	5.12		ug/L		102	80 - 120
Selenium	10.0	10.43		ug/L		104	80 - 120
Vanadium	10.0	10.08		ug/L		101	80 - 120
Zinc	50.0	49.88		ug/L		100	80 - 120
Aluminum	500	496.9		ug/L		99	80 - 120
Sodium	500	524.1		ug/L		105	80 - 120
Magnesium	500	498.5		ug/L		100	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-549692/2-A
Matrix: Water
Analysis Batch: 549568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	500	506.1		ug/L		101	80 - 120
Calcium	500	506.1		ug/L		101	80 - 120
Iron	500	546.3		ug/L		109	80 - 120
Thallium	4.00	3.98		ug/L		99	80 - 120

Lab Sample ID: LCS 460-549696/2-A
Matrix: Water
Analysis Batch: 550980

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549696

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.00	4.65		ug/L		93	80 - 120
Arsenic	10.0	10.05		ug/L		101	80 - 120
Barium	10.0	9.97		ug/L		100	80 - 120
Cadmium	5.00	5.12		ug/L		102	80 - 120
Cobalt	5.00	5.05		ug/L		101	80 - 120
Chromium	10.0	10.02		ug/L		100	80 - 120
Copper	10.0	10.10		ug/L		101	80 - 120
Manganese	50.0	51.97		ug/L		104	80 - 120
Nickel	10.0	10.14		ug/L		101	80 - 120
Lead	5.00	4.98		ug/L		100	80 - 120
Antimony	5.00	4.93		ug/L		99	80 - 120
Selenium	10.0	9.97		ug/L		100	80 - 120
Vanadium	10.0	10.05		ug/L		101	80 - 120
Zinc	50.0	51.27		ug/L		103	80 - 120
Aluminum	500	498.4		ug/L		100	80 - 120
Sodium	500	540.1		ug/L		108	80 - 120
Magnesium	500	494.9		ug/L		99	80 - 120
Potassium	500	498.7		ug/L		100	80 - 120
Calcium	500	547.4		ug/L		109	80 - 120
Iron	500	530.6		ug/L		106	80 - 120
Thallium	4.00	3.96		ug/L		99	80 - 120

Lab Sample ID: LCS 460-549696/2-A
Matrix: Water
Analysis Batch: 551313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549696

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.00	4.68		ug/L		94	80 - 120
Arsenic	10.0	10.51		ug/L		105	80 - 120
Barium	10.0	10.03		ug/L		100	80 - 120
Beryllium	5.00	4.51		ug/L		90	80 - 120
Cadmium	5.00	4.88		ug/L		98	80 - 120
Cobalt	5.00	5.13		ug/L		103	80 - 120
Chromium	10.0	10.22		ug/L		102	80 - 120
Copper	10.0	10.36		ug/L		104	80 - 120
Manganese	50.0	51.71		ug/L		103	80 - 120
Nickel	10.0	10.42		ug/L		104	80 - 120
Lead	5.00	5.07		ug/L		101	80 - 120
Antimony	5.00	5.17		ug/L		103	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-549696/2-A
Matrix: Water
Analysis Batch: 551313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549696

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	10.0	10.42		ug/L		104	80 - 120
Vanadium	10.0	10.18		ug/L		102	80 - 120
Zinc	50.0	51.87		ug/L		104	80 - 120
Aluminum	500	498.6		ug/L		100	80 - 120
Sodium	500	532.5		ug/L		106	80 - 120
Magnesium	500	497.0		ug/L		99	80 - 120
Potassium	500	505.2		ug/L		101	80 - 120
Calcium	500	549.6		ug/L		110	80 - 120
Iron	500	536.9		ug/L		107	80 - 120
Thallium	4.00	4.03		ug/L		101	80 - 120

Lab Sample ID: MB 460-549767/1-A ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549767

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/05/18 19:45	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:58	09/05/18 19:45	2
Barium	1.1	U	4.0	1.1	ug/L		09/05/18 08:58	09/05/18 19:45	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/05/18 19:45	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/05/18 19:45	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/05/18 19:45	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/05/18 19:45	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 08:58	09/05/18 19:45	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/05/18 19:45	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:58	09/05/18 19:45	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/05/18 19:45	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/05/18 19:45	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:58	09/05/18 19:45	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:58	09/05/18 19:45	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 08:58	09/05/18 19:45	2
Sodium	75.7	U	200	75.7	ug/L		09/05/18 08:58	09/05/18 19:45	2
Magnesium	65.7	U	200	65.7	ug/L		09/05/18 08:58	09/05/18 19:45	2
Potassium	64.9	U	200	64.9	ug/L		09/05/18 08:58	09/05/18 19:45	2
Calcium	67.6	U	200	67.6	ug/L		09/05/18 08:58	09/05/18 19:45	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 08:58	09/05/18 19:45	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/05/18 19:45	2

Lab Sample ID: MB 460-549767/1-A ^2
Matrix: Water
Analysis Batch: 550229

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549767

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 19:03	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-549767/2-A ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549767

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	24.40		ug/L		98	80 - 120
Arsenic	50.0	49.93		ug/L		100	80 - 120
Barium	50.0	48.11		ug/L		96	80 - 120
Beryllium	25.0	25.36		ug/L		101	80 - 120
Cadmium	25.0	24.27		ug/L		97	80 - 120
Cobalt	25.0	23.55		ug/L		94	80 - 120
Chromium	50.0	47.94		ug/L		96	80 - 120
Copper	50.0	50.16		ug/L		100	80 - 120
Manganese	250	243.9		ug/L		98	80 - 120
Nickel	50.0	48.05		ug/L		96	80 - 120
Lead	25.0	24.27		ug/L		97	80 - 120
Antimony	25.0	23.47		ug/L		94	80 - 120
Selenium	50.0	51.18		ug/L		102	80 - 120
Vanadium	50.0	46.77		ug/L		94	80 - 120
Zinc	250	240.8		ug/L		96	80 - 120
Aluminum	2500	2370		ug/L		95	80 - 120
Sodium	2500	2494		ug/L		100	80 - 120
Magnesium	2500	2447		ug/L		98	80 - 120
Potassium	2500	2385		ug/L		95	80 - 120
Calcium	2500	2583		ug/L		103	80 - 120
Iron	2500	2416		ug/L		97	80 - 120
Thallium	20.0	19.17		ug/L		96	80 - 120

Lab Sample ID: 460-163433-M-2-D MS ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 549767

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	25.0	23.50		ug/L		94	75 - 125
Arsenic	5.7		50.0	55.99		ug/L		101	75 - 125
Barium	322		50.0	390.4	4	ug/L		136	75 - 125
Beryllium	0.26	U	25.0	27.09		ug/L		108	75 - 125
Cadmium	0.61	U	25.0	24.17		ug/L		97	75 - 125
Cobalt	1.4	J	25.0	24.08		ug/L		91	75 - 125
Chromium	46.1		50.0	97.41		ug/L		103	75 - 125
Copper	11.8		50.0	57.15		ug/L		91	75 - 125
Manganese	4320		250	4682	4	ug/L		144	75 - 125
Nickel	28.6		50.0	76.17		ug/L		95	75 - 125
Lead	7.9		25.0	34.89		ug/L		108	75 - 125
Antimony	0.62	U	25.0	25.55		ug/L		102	75 - 125
Selenium	0.69	U	50.0	48.15		ug/L		96	75 - 125
Vanadium	4.1		50.0	53.08		ug/L		98	75 - 125
Zinc	10.7	J	250	243.1		ug/L		93	75 - 125
Aluminum	764		2500	3266		ug/L		100	75 - 125
Magnesium	28400		2500	31990	4	ug/L		144	75 - 125
Potassium	33500		2500	36950	4	ug/L		137	75 - 125
Calcium	237000		2500	249200	4	ug/L		486	75 - 125
Iron	13800		2500	16870	4	ug/L		124	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163433-M-2-D MS ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 549767

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	0.24	U	20.0	21.01		ug/L		105	75 - 125

Lab Sample ID: 460-163433-M-2-D MS ^20
Matrix: Water
Analysis Batch: 550229

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 549767

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	1290000		2500	1274000	4	ug/L		-443	75 - 125

Lab Sample ID: 460-163433-M-2-C DU ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 549767

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	5.7		5.64		ug/L		1	20
Barium	322		324.5		ug/L		0.6	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	1.4	J	1.36	J	ug/L		2	20
Chromium	46.1		44.26		ug/L		4	20
Copper	11.8		12.08		ug/L		2	20
Manganese	4320		4374		ug/L		1	20
Nickel	28.6		27.52		ug/L		4	20
Lead	7.9		7.84		ug/L		0.2	20
Antimony	0.62	U	0.676	J	ug/L		NC	20
Selenium	0.69	U	0.69	U	ug/L		NC	20
Vanadium	4.1		4.06		ug/L		1	20
Zinc	10.7	J	12.37	J	ug/L		14	20
Aluminum	764		695.5		ug/L		9	20
Magnesium	28400		28920		ug/L		2	20
Potassium	33500		33590		ug/L		0.2	20
Calcium	237000		240500		ug/L		1	20
Iron	13800		13890		ug/L		0.8	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Lab Sample ID: 460-163433-M-2-C DU ^20
Matrix: Water
Analysis Batch: 550229

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 549767

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sodium	1290000		1267000		ug/L		1	20

Lab Sample ID: MB 460-549768/1-A ^2
Matrix: Water
Analysis Batch: 551612

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:59	09/12/18 20:27	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-549768/1-A ^2
Matrix: Water
Analysis Batch: 551612

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:59	09/12/18 20:27	2
Barium	1.1	U	4.0	1.1	ug/L		09/05/18 08:59	09/12/18 20:27	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:59	09/12/18 20:27	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:59	09/12/18 20:27	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 20:27	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 20:27	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:59	09/12/18 20:27	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 08:59	09/12/18 20:27	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:59	09/12/18 20:27	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:59	09/12/18 20:27	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:59	09/12/18 20:27	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:59	09/12/18 20:27	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:59	09/12/18 20:27	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:59	09/12/18 20:27	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 08:59	09/12/18 20:27	2
Sodium	75.7	U	200	75.7	ug/L		09/05/18 08:59	09/12/18 20:27	2
Magnesium	65.7	U	200	65.7	ug/L		09/05/18 08:59	09/12/18 20:27	2
Potassium	64.9	U	200	64.9	ug/L		09/05/18 08:59	09/12/18 20:27	2
Calcium	67.6	U	200	67.6	ug/L		09/05/18 08:59	09/12/18 20:27	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 08:59	09/12/18 20:27	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:59	09/12/18 20:27	2

Lab Sample ID: LCS 460-549768/2-A ^2
Matrix: Water
Analysis Batch: 551612

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549768

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	24.55		ug/L		98	80 - 120
Arsenic	50.0	54.31		ug/L		109	80 - 120
Barium	50.0	48.14		ug/L		96	80 - 120
Beryllium	25.0	22.34		ug/L		89	80 - 120
Cadmium	25.0	24.43		ug/L		98	80 - 120
Cobalt	25.0	24.76		ug/L		99	80 - 120
Chromium	50.0	48.82		ug/L		98	80 - 120
Copper	50.0	50.10		ug/L		100	80 - 120
Manganese	250	249.1		ug/L		100	80 - 120
Nickel	50.0	49.21		ug/L		98	80 - 120
Lead	25.0	24.68		ug/L		99	80 - 120
Antimony	25.0	25.71		ug/L		103	80 - 120
Selenium	50.0	51.11		ug/L		102	80 - 120
Vanadium	50.0	48.41		ug/L		97	80 - 120
Zinc	250	237.9		ug/L		95	80 - 120
Aluminum	2500	2361		ug/L		94	80 - 120
Sodium	2500	2550		ug/L		102	80 - 120
Magnesium	2500	2376		ug/L		95	80 - 120
Potassium	2500	2419		ug/L		97	80 - 120
Calcium	2500	2524		ug/L		101	80 - 120
Iron	2500	2611		ug/L		104	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-549768/2-A ^2
Matrix: Water
Analysis Batch: 551612

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549768

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Thallium			20.0	19.54		ug/L		98	80 - 120		

Lab Sample ID: 460-163415-3 MS
Matrix: Water
Analysis Batch: 551612

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA
Prep Batch: 549768

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silver	1.4	U	25.0	24.89		ug/L		100	75 - 125		
Arsenic	0.77	U	50.0	47.85		ug/L		96	75 - 125		
Barium	40.1		50.0	91.14		ug/L		102	75 - 125		
Beryllium	0.26	U	25.0	23.23		ug/L		93	75 - 125		
Cadmium	0.61	U	25.0	24.29		ug/L		97	75 - 125		
Cobalt	1.3	U	25.0	26.35		ug/L		105	75 - 125		
Chromium	1.3	U	50.0	51.03		ug/L		102	75 - 125		
Copper	2.6	J	50.0	54.06		ug/L		103	75 - 125		
Manganese	2000		250	2291	4	ug/L		118	75 - 125		
Nickel	1.3	U	50.0	52.38		ug/L		105	75 - 125		
Lead	0.44	J	25.0	26.07		ug/L		103	75 - 125		
Antimony	0.85	J	25.0	25.97		ug/L		100	75 - 125		
Selenium	0.69	U	50.0	48.76		ug/L		98	75 - 125		
Vanadium	1.2	U	50.0	51.22		ug/L		102	75 - 125		
Zinc	5.4	U	250	248.2		ug/L		99	75 - 125		
Aluminum	82.5		2500	2549		ug/L		99	75 - 125		
Sodium	39200		2500	42520	4	ug/L		132	75 - 125		
Magnesium	8370		2500	11020		ug/L		106	75 - 125		
Potassium	7180		2500	9739		ug/L		102	75 - 125		
Calcium	39500		2500	42570	4	ug/L		123	75 - 125		
Iron	3120		2500	5716		ug/L		104	75 - 125		
Thallium	0.24	U	20.0	20.53		ug/L		103	75 - 125		

Lab Sample ID: 460-163415-3 DU
Matrix: Water
Analysis Batch: 551612

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA
Prep Batch: 549768

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Silver	1.4	U		1.4	U	ug/L				NC	20
Arsenic	0.77	U		0.77	U	ug/L				NC	20
Barium	40.1			40.87		ug/L				2	20
Beryllium	0.26	U		0.26	U	ug/L				NC	20
Cadmium	0.61	U		0.61	U	ug/L				NC	20
Cobalt	1.3	U		1.3	U	ug/L				NC	20
Chromium	1.3	U		1.3	U	ug/L				NC	20
Copper	2.6	J		1.98	J F5	ug/L				26	20
Manganese	2000			2010		ug/L				0.7	20
Nickel	1.3	U		1.3	U	ug/L				NC	20
Lead	0.44	J		0.470	J	ug/L				6	20
Antimony	0.85	J		0.798	J	ug/L				6	20
Selenium	0.69	U		0.69	U	ug/L				NC	20
Vanadium	1.2	U		1.2	U	ug/L				NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163415-3 DU
Matrix: Water
Analysis Batch: 551612

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA
Prep Batch: 549768

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Zinc	5.4	U	5.4	U	ug/L		NC	20
Aluminum	82.5		75.62		ug/L		9	20
Sodium	39200		39700		ug/L		1	20
Magnesium	8370		8441		ug/L		0.9	20
Potassium	7180		7238		ug/L		0.8	20
Calcium	39500		39670		ug/L		0.4	20
Iron	3120		3129		ug/L		0.2	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Lab Sample ID: MB 460-549769/1-A ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549769

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 09:00	09/05/18 18:54	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 09:00	09/05/18 18:54	2
Barium	1.1	U	4.0	1.1	ug/L		09/05/18 09:00	09/05/18 18:54	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 09:00	09/05/18 18:54	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 09:00	09/05/18 18:54	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 09:00	09/05/18 18:54	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 09:00	09/05/18 18:54	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 09:00	09/05/18 18:54	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 09:00	09/05/18 18:54	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 09:00	09/05/18 18:54	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 09:00	09/05/18 18:54	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 09:00	09/05/18 18:54	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 09:00	09/05/18 18:54	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 09:00	09/05/18 18:54	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 09:00	09/05/18 18:54	2
Sodium	75.7	U	200	75.7	ug/L		09/05/18 09:00	09/05/18 18:54	2
Magnesium	65.7	U	200	65.7	ug/L		09/05/18 09:00	09/05/18 18:54	2
Potassium	64.9	U	200	64.9	ug/L		09/05/18 09:00	09/05/18 18:54	2
Calcium	67.6	U	200	67.6	ug/L		09/05/18 09:00	09/05/18 18:54	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 09:00	09/05/18 18:54	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 09:00	09/05/18 18:54	2

Lab Sample ID: MB 460-549769/1-A ^2
Matrix: Water
Analysis Batch: 550229

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549769

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 09:00	09/06/18 19:32	2

Lab Sample ID: LCS 460-549769/2-A ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549769

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	24.70		ug/L		99	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-549769/2-A ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549769

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	50.99		ug/L		102	80 - 120
Barium	50.0	48.81		ug/L		98	80 - 120
Beryllium	25.0	27.11		ug/L		108	80 - 120
Cadmium	25.0	24.73		ug/L		99	80 - 120
Cobalt	25.0	23.99		ug/L		96	80 - 120
Chromium	50.0	49.47		ug/L		99	80 - 120
Copper	50.0	51.77		ug/L		104	80 - 120
Manganese	250	250.9		ug/L		100	80 - 120
Nickel	50.0	49.38		ug/L		99	80 - 120
Lead	25.0	24.41		ug/L		98	80 - 120
Antimony	25.0	24.57		ug/L		98	80 - 120
Selenium	50.0	50.00		ug/L		100	80 - 120
Vanadium	50.0	47.99		ug/L		96	80 - 120
Zinc	250	245.3		ug/L		98	80 - 120
Aluminum	2500	2371		ug/L		95	80 - 120
Sodium	2500	2531		ug/L		101	80 - 120
Magnesium	2500	2493		ug/L		100	80 - 120
Potassium	2500	2454		ug/L		98	80 - 120
Calcium	2500	2646		ug/L		106	80 - 120
Iron	2500	2467		ug/L		99	80 - 120
Thallium	20.0	19.53		ug/L		98	80 - 120

Lab Sample ID: 460-163415-26 MS
Matrix: Water
Analysis Batch: 549850

Client Sample ID: SP-00-082718
Prep Type: Total/NA
Prep Batch: 549769

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	25.0	25.04		ug/L		100	75 - 125
Arsenic	0.77	U	50.0	48.86		ug/L		98	75 - 125
Barium	9.5		50.0	58.43		ug/L		98	75 - 125
Beryllium	0.26	U	25.0	26.74		ug/L		107	75 - 125
Cadmium	0.61	U	25.0	24.14		ug/L		97	75 - 125
Cobalt	1.3	U	25.0	24.31		ug/L		97	75 - 125
Chromium	1.3	U	50.0	49.91		ug/L		100	75 - 125
Copper	4.4		50.0	54.40		ug/L		100	75 - 125
Manganese	47.5		250	297.8		ug/L		100	75 - 125
Nickel	1.3	U	50.0	49.69		ug/L		99	75 - 125
Lead	0.37	U	25.0	25.38		ug/L		102	75 - 125
Antimony	0.62	U	25.0	24.63		ug/L		99	75 - 125
Selenium	0.69	U	50.0	48.82		ug/L		98	75 - 125
Vanadium	1.2	U	50.0	49.33		ug/L		99	75 - 125
Zinc	5.4	U	250	248.6		ug/L		99	75 - 125
Aluminum	54.7		2500	2485		ug/L		97	75 - 125
Sodium	14600		2500	16510	4	ug/L		76	75 - 125
Magnesium	2750		2500	5159		ug/L		96	75 - 125
Potassium	657		2500	3132		ug/L		99	75 - 125
Calcium	8770		2500	11100		ug/L		93	75 - 125
Iron	474		2500	2925		ug/L		98	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163415-26 MS
Matrix: Water
Analysis Batch: 549850

Client Sample ID: SP-00-082718
Prep Type: Total/NA
Prep Batch: 549769

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	0.24	U	20.0	19.90		ug/L		100	75 - 125

Lab Sample ID: 460-163415-26 DU
Matrix: Water
Analysis Batch: 549850

Client Sample ID: SP-00-082718
Prep Type: Total/NA
Prep Batch: 549769

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	0.77	U	0.77	U	ug/L		NC	20
Barium	9.5		9.07		ug/L		4	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	1.3	U	1.3	U	ug/L		NC	20
Chromium	1.3	U	1.3	U	ug/L		NC	20
Copper	4.4		4.52		ug/L		2	20
Manganese	47.5		47.86		ug/L		0.9	20
Nickel	1.3	U	1.3	U	ug/L		NC	20
Lead	0.37	U	0.37	U	ug/L		NC	20
Antimony	0.62	U	0.62	U	ug/L		NC	20
Selenium	0.69	U	0.69	U	ug/L		NC	20
Vanadium	1.2	U	1.2	U	ug/L		NC	20
Zinc	5.4	U	5.4	U	ug/L		NC	20
Aluminum	54.7		52.10		ug/L		5	20
Sodium	14600		14770		ug/L		1	20
Magnesium	2750		2781		ug/L		1	20
Potassium	657		668.7		ug/L		2	20
Calcium	8770		8995		ug/L		3	20
Iron	474		479.5		ug/L		1	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Lab Sample ID: MB 460-549516/1-B
Matrix: Water
Analysis Batch: 549568

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 549692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.68	U	1.0	0.68	ug/L		09/05/18 01:39	09/05/18 05:35	1
Arsenic	0.38	U	1.0	0.38	ug/L		09/05/18 01:39	09/05/18 05:35	1
Barium	0.57	U	2.0	0.57	ug/L		09/05/18 01:39	09/05/18 05:35	1
Beryllium	0.13	U	0.40	0.13	ug/L		09/05/18 01:39	09/05/18 05:35	1
Cadmium	0.31	U	1.0	0.31	ug/L		09/05/18 01:39	09/05/18 05:35	1
Cobalt	0.64	U	2.0	0.64	ug/L		09/05/18 01:39	09/05/18 05:35	1
Chromium	0.66	U	2.0	0.66	ug/L		09/05/18 01:39	09/05/18 05:35	1
Copper	0.95	U	2.0	0.95	ug/L		09/05/18 01:39	09/05/18 05:35	1
Manganese	1.3	U	4.0	1.3	ug/L		09/05/18 01:39	09/05/18 05:35	1
Nickel	0.65	U	2.0	0.65	ug/L		09/05/18 01:39	09/05/18 05:35	1
Lead	0.19	U	0.60	0.19	ug/L		09/05/18 01:39	09/05/18 05:35	1
Antimony	0.31	U	1.0	0.31	ug/L		09/05/18 01:39	09/05/18 05:35	1
Selenium	0.35	U	5.0	0.35	ug/L		09/05/18 01:39	09/05/18 05:35	1
Vanadium	0.59	U	2.0	0.59	ug/L		09/05/18 01:39	09/05/18 05:35	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-549516/1-B
Matrix: Water
Analysis Batch: 549568

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 549692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	2.7	U	8.0	2.7	ug/L		09/05/18 01:39	09/05/18 05:35	1
Aluminum	7.5	U	20.0	7.5	ug/L		09/05/18 01:39	09/05/18 05:35	1
Sodium	37.9	U	100	37.9	ug/L		09/05/18 01:39	09/05/18 05:35	1
Magnesium	32.9	U	100	32.9	ug/L		09/05/18 01:39	09/05/18 05:35	1
Potassium	32.5	U	100	32.5	ug/L		09/05/18 01:39	09/05/18 05:35	1
Calcium	33.8	U	100	33.8	ug/L		09/05/18 01:39	09/05/18 05:35	1
Iron	22.9	U	60.0	22.9	ug/L		09/05/18 01:39	09/05/18 05:35	1
Thallium	0.12	U	0.40	0.12	ug/L		09/05/18 01:39	09/05/18 05:35	1

Lab Sample ID: 460-163415-3 MS
Matrix: Water
Analysis Batch: 549568

Client Sample ID: PMB-01A-082718
Prep Type: Dissolved
Prep Batch: 549692

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	10.0	8.66		ug/L		87	75 - 125
Arsenic	0.77	U	20.0	20.93		ug/L		105	75 - 125
Barium	34.1		20.0	55.04		ug/L		105	75 - 125
Beryllium	0.26	U	10.0	10.28		ug/L		103	75 - 125
Cadmium	0.61	U	10.0	9.60		ug/L		96	75 - 125
Cobalt	1.3	U	10.0	10.09		ug/L		101	75 - 125
Chromium	1.3	U	20.0	20.03		ug/L		100	75 - 125
Copper	1.9	U	20.0	20.53		ug/L		103	75 - 125
Manganese	1780		100	1894	4	ug/L		110	75 - 125
Nickel	1.3	U	20.0	20.33		ug/L		102	75 - 125
Lead	0.37	U	10.0	9.99		ug/L		100	75 - 125
Antimony	0.62	U	10.0	9.22		ug/L		92	75 - 125
Selenium	0.69	U	20.0	20.37		ug/L		102	75 - 125
Vanadium	1.2	U	20.0	20.00		ug/L		100	75 - 125
Zinc	5.4	U	100	96.62		ug/L		97	75 - 125
Aluminum	15.0	U	1000	963.1		ug/L		96	75 - 125
Sodium	40100		1000	41430	4	ug/L		136	75 - 125
Magnesium	8350		1000	9386	4	ug/L		103	75 - 125
Potassium	7130		1000	8153	4	ug/L		102	75 - 125
Calcium	38900		1000	40440	4	ug/L		156	75 - 125
Iron	45.7	U	1000	1121		ug/L		112	75 - 125
Thallium	0.24	U	8.00	7.90		ug/L		99	75 - 125

Lab Sample ID: 460-163415-3 DU
Matrix: Water
Analysis Batch: 549568

Client Sample ID: PMB-01A-082718
Prep Type: Dissolved
Prep Batch: 549692

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	0.77	U	0.77	U	ug/L		NC	20
Barium	34.1		34.14		ug/L		0.1	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	1.3	U	1.3	U	ug/L		NC	20
Chromium	1.3	U	1.3	U	ug/L		NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163415-3 DU
Matrix: Water
Analysis Batch: 549568

Client Sample ID: PMB-01A-082718
Prep Type: Dissolved
Prep Batch: 549692

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Copper	1.9	U	1.9	U	ug/L		NC	20
Manganese	1780		1729		ug/L		3	20
Nickel	1.3	U	1.3	U	ug/L		NC	20
Lead	0.37	U	0.37	U	ug/L		NC	20
Antimony	0.62	U	0.62	U	ug/L		NC	20
Selenium	0.69	U	0.69	U	ug/L		NC	20
Vanadium	1.2	U	1.2	U	ug/L		NC	20
Zinc	5.4	U	5.4	U	ug/L		NC	20
Aluminum	15.0	U	15.0	U	ug/L		NC	20
Sodium	40100		39080		ug/L		2	20
Magnesium	8350		8147		ug/L		2	20
Potassium	7130		6953		ug/L		3	20
Calcium	38900		37950		ug/L		2	20
Iron	45.7	U	45.7	U	ug/L		NC	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Lab Sample ID: MB 460-549517/1-B
Matrix: Water
Analysis Batch: 550980

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 549696

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.68	U	1.0	0.68	ug/L		09/05/18 02:47	09/10/18 21:23	1
Arsenic	0.38	U	1.0	0.38	ug/L		09/05/18 02:47	09/10/18 21:23	1
Barium	0.57	U	2.0	0.57	ug/L		09/05/18 02:47	09/10/18 21:23	1
Cadmium	0.31	U	1.0	0.31	ug/L		09/05/18 02:47	09/10/18 21:23	1
Cobalt	0.64	U	2.0	0.64	ug/L		09/05/18 02:47	09/10/18 21:23	1
Chromium	0.66	U	2.0	0.66	ug/L		09/05/18 02:47	09/10/18 21:23	1
Copper	0.95	U	2.0	0.95	ug/L		09/05/18 02:47	09/10/18 21:23	1
Manganese	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/10/18 21:23	1
Nickel	0.65	U	2.0	0.65	ug/L		09/05/18 02:47	09/10/18 21:23	1
Lead	0.19	U	0.60	0.19	ug/L		09/05/18 02:47	09/10/18 21:23	1
Antimony	0.31	U	1.0	0.31	ug/L		09/05/18 02:47	09/10/18 21:23	1
Selenium	0.35	U	5.0	0.35	ug/L		09/05/18 02:47	09/10/18 21:23	1
Vanadium	0.59	U	2.0	0.59	ug/L		09/05/18 02:47	09/10/18 21:23	1
Zinc	2.7	U	8.0	2.7	ug/L		09/05/18 02:47	09/10/18 21:23	1
Aluminum	7.5	U	20.0	7.5	ug/L		09/05/18 02:47	09/10/18 21:23	1
Sodium	37.9	U	100	37.9	ug/L		09/05/18 02:47	09/10/18 21:23	1
Magnesium	32.9	U	100	32.9	ug/L		09/05/18 02:47	09/10/18 21:23	1
Potassium	32.5	U	100	32.5	ug/L		09/05/18 02:47	09/10/18 21:23	1
Calcium	33.8	U	100	33.8	ug/L		09/05/18 02:47	09/10/18 21:23	1
Iron	22.9	U	60.0	22.9	ug/L		09/05/18 02:47	09/10/18 21:23	1
Thallium	0.12	U	0.40	0.12	ug/L		09/05/18 02:47	09/10/18 21:23	1

Lab Sample ID: MB 460-549517/1-B
Matrix: Water
Analysis Batch: 551313

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 549696

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.68	U	1.0	0.68	ug/L		09/05/18 02:47	09/11/18 15:14	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-549517/1-B
Matrix: Water
Analysis Batch: 551313

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 549696

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.38	U	1.0	0.38	ug/L		09/05/18 02:47	09/11/18 15:14	1
Barium	0.57	U	2.0	0.57	ug/L		09/05/18 02:47	09/11/18 15:14	1
Beryllium	0.13	U	0.40	0.13	ug/L		09/05/18 02:47	09/11/18 15:14	1
Cadmium	0.31	U	1.0	0.31	ug/L		09/05/18 02:47	09/11/18 15:14	1
Cobalt	0.64	U	2.0	0.64	ug/L		09/05/18 02:47	09/11/18 15:14	1
Chromium	0.66	U	2.0	0.66	ug/L		09/05/18 02:47	09/11/18 15:14	1
Copper	0.95	U	2.0	0.95	ug/L		09/05/18 02:47	09/11/18 15:14	1
Manganese	1.3	U	4.0	1.3	ug/L		09/05/18 02:47	09/11/18 15:14	1
Nickel	0.65	U	2.0	0.65	ug/L		09/05/18 02:47	09/11/18 15:14	1
Lead	0.19	U	0.60	0.19	ug/L		09/05/18 02:47	09/11/18 15:14	1
Antimony	0.31	U	1.0	0.31	ug/L		09/05/18 02:47	09/11/18 15:14	1
Selenium	0.35	U	5.0	0.35	ug/L		09/05/18 02:47	09/11/18 15:14	1
Vanadium	0.59	U	2.0	0.59	ug/L		09/05/18 02:47	09/11/18 15:14	1
Zinc	2.7	U	8.0	2.7	ug/L		09/05/18 02:47	09/11/18 15:14	1
Aluminum	7.5	U	20.0	7.5	ug/L		09/05/18 02:47	09/11/18 15:14	1
Sodium	37.9	U	100	37.9	ug/L		09/05/18 02:47	09/11/18 15:14	1
Magnesium	32.9	U	100	32.9	ug/L		09/05/18 02:47	09/11/18 15:14	1
Potassium	32.5	U	100	32.5	ug/L		09/05/18 02:47	09/11/18 15:14	1
Calcium	33.8	U	100	33.8	ug/L		09/05/18 02:47	09/11/18 15:14	1
Iron	22.9	U	60.0	22.9	ug/L		09/05/18 02:47	09/11/18 15:14	1
Thallium	0.12	U	0.40	0.12	ug/L		09/05/18 02:47	09/11/18 15:14	1

Lab Sample ID: 460-163415-26 MS
Matrix: Water
Analysis Batch: 551313

Client Sample ID: SP-00-082718
Prep Type: Dissolved
Prep Batch: 549696

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	10.0	10.61		ug/L		106	75 - 125
Arsenic	0.77	U	20.0	21.08		ug/L		105	75 - 125
Barium	7.9		20.0	27.97		ug/L		100	75 - 125
Beryllium	0.26	U	10.0	9.93		ug/L		99	75 - 125
Cadmium	0.61	U	10.0	10.16		ug/L		102	75 - 125
Cobalt	1.3	U	10.0	10.06		ug/L		101	75 - 125
Chromium	1.3	U	20.0	19.91		ug/L		100	75 - 125
Copper	1.9	U	20.0	21.05		ug/L		105	75 - 125
Manganese	2.7	U	100	103.5		ug/L		104	75 - 125
Nickel	1.3	U	20.0	20.37		ug/L		102	75 - 125
Lead	0.37	U	10.0	10.24		ug/L		102	75 - 125
Antimony	0.62	U	10.0	9.47		ug/L		95	75 - 125
Selenium	0.69	U	20.0	20.08		ug/L		100	75 - 125
Vanadium	1.2	U	20.0	20.72		ug/L		104	75 - 125
Zinc	5.4	U	100	105.9		ug/L		106	75 - 125
Aluminum	15.0	U	1000	1011		ug/L		101	75 - 125
Sodium	13800		1000	15320	4	ug/L		149	75 - 125
Magnesium	2500		1000	3537		ug/L		104	75 - 125
Potassium	618		1000	1650		ug/L		103	75 - 125
Calcium	8450		1000	9585	4	ug/L		113	75 - 125
Iron	161		1000	1222		ug/L		106	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163415-26 MS
Matrix: Water
Analysis Batch: 551313

Client Sample ID: SP-00-082718
Prep Type: Dissolved
Prep Batch: 549696

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	0.24	U	8.00	8.00		ug/L		100	75 - 125

Lab Sample ID: 460-163415-26 DU
Matrix: Water
Analysis Batch: 551313

Client Sample ID: SP-00-082718
Prep Type: Dissolved
Prep Batch: 549696

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	0.77	U	0.77	U	ug/L		NC	20
Barium	7.9		8.88		ug/L		12	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	1.3	U	1.3	U	ug/L		NC	20
Chromium	1.3	U	1.3	U	ug/L		NC	20
Copper	1.9	U	1.9	U	ug/L		NC	20
Manganese	2.7	U	2.7	U	ug/L		NC	20
Nickel	1.3	U	1.3	U	ug/L		NC	20
Lead	0.37	U	0.37	U	ug/L		NC	20
Antimony	0.62	U	0.62	U	ug/L		NC	20
Selenium	0.69	U	0.69	U	ug/L		NC	20
Vanadium	1.2	U	1.2	U	ug/L		NC	20
Zinc	5.4	U	5.4	U	ug/L		NC	20
Aluminum	15.0	U	15.0	U	ug/L		NC	20
Sodium	13800		15320		ug/L		10	20
Magnesium	2500		2776		ug/L		10	20
Potassium	618		670.9		ug/L		8	20
Calcium	8450		9175		ug/L		8	20
Iron	161		180.3		ug/L		11	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 460-548961/1-A
Matrix: Water
Analysis Batch: 549004

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548961

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:10	08/31/18 14:31	1

Lab Sample ID: LCS 460-548961/2-A
Matrix: Water
Analysis Batch: 549004

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548961

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.841		ug/L		84	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 460-163415-3 MS — **Client Sample ID: PMB-01A-082718**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549004 — **Prep Batch: 548961**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	0.932		ug/L		93	75 - 125

Lab Sample ID: 460-163415-3 DU — **Client Sample ID: PMB-01A-082718**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549004 — **Prep Batch: 548961**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Lab Sample ID: LCS 460-548966/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549004 — **Prep Batch: 548966**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	1.00		ug/L		100	80 - 120

Lab Sample ID: MB 460-549450/13-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549548 — **Prep Batch: 549450**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 04:23	09/04/18 08:05	1

Lab Sample ID: LCS 460-549450/14-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549548 — **Prep Batch: 549450**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.998		ug/L		100	80 - 120

Lab Sample ID: 460-163415-26 MS — **Client Sample ID: SP-00-082718**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549548 — **Prep Batch: 549450**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	1.02		ug/L		102	75 - 125

Lab Sample ID: 460-163415-26 DU — **Client Sample ID: SP-00-082718**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549548 — **Prep Batch: 549450**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Lab Sample ID: LCS 460-549452/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549548 — **Prep Batch: 549452**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.997		ug/L		100	80 - 120

Lab Sample ID: MB 460-549464/1-A
Matrix: Water
Analysis Batch: 549548

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549464

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:55	09/04/18 10:38	1

Lab Sample ID: LCS 460-549464/2-A
Matrix: Water
Analysis Batch: 549548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549464

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.980		ug/L		98	80 - 120

Lab Sample ID: 460-163051-G-1-C MS
Matrix: Water
Analysis Batch: 549548

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 549464

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	1.03		ug/L		103	75 - 125

Lab Sample ID: 460-163051-G-1-B DU
Matrix: Water
Analysis Batch: 549548

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 549464

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Lab Sample ID: MB 460-548960/1-B
Matrix: Water
Analysis Batch: 549004

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 548966

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		08/31/18 13:24	08/31/18 16:21	1

Lab Sample ID: 460-163415-3 MS
Matrix: Water
Analysis Batch: 549004

Client Sample ID: PMB-01A-082718
Prep Type: Dissolved
Prep Batch: 548966

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	0.943		ug/L		94	75 - 125

Lab Sample ID: 460-163415-3 DU
Matrix: Water
Analysis Batch: 549004

Client Sample ID: PMB-01A-082718
Prep Type: Dissolved
Prep Batch: 548966

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Lab Sample ID: MB 460-549449/1-B
Matrix: Water
Analysis Batch: 549548

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 549452

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/04/18 05:20	09/04/18 09:48	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 460-163415-26 MS — **Client Sample ID: SP-00-082718**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 549548 — **Prep Batch: 549452**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	1.07		ug/L		107	75 - 125

Lab Sample ID: 460-163415-26 DU — **Client Sample ID: SP-00-082718**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 549548 — **Prep Batch: 549452**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 460-548890/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548949 — **Prep Batch: 548890**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		08/31/18 08:47	08/31/18 10:11	1

Lab Sample ID: LCS 460-548890/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548949 — **Prep Batch: 548890**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0995		mg/L		100	85 - 115

Lab Sample ID: 460-163366-F-4-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548949 — **Prep Batch: 548890**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0020	U	0.200	0.226		mg/L		113	75 - 125

Lab Sample ID: 460-163366-F-4-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 548949 — **Prep Batch: 548890**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U	0.200	0.239		mg/L		120	75 - 125	6	20

Lab Sample ID: MB 460-549508/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549577 — **Prep Batch: 549508**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/04/18 08:27	09/04/18 12:23	1

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LCS 460-549508/2-A
Matrix: Water
Analysis Batch: 549577

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549508

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			0.100	0.103		mg/L		103	85 - 115		

Lab Sample ID: 460-163415-3 MS
Matrix: Water
Analysis Batch: 549577

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA
Prep Batch: 549508

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.0020	U	0.200	0.207		mg/L		104	75 - 125		

Lab Sample ID: 460-163415-3 MSD
Matrix: Water
Analysis Batch: 549577

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA
Prep Batch: 549508

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U	0.200	0.201		mg/L		101	75 - 125	3	20

Lab Sample ID: 460-163415-26 MS
Matrix: Water
Analysis Batch: 549577

Client Sample ID: SP-00-082718
Prep Type: Total/NA
Prep Batch: 549508

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.0020	U	0.200	0.218		mg/L		109	75 - 125		

Lab Sample ID: 460-163415-26 MSD
Matrix: Water
Analysis Batch: 549577

Client Sample ID: SP-00-082718
Prep Type: Total/NA
Prep Batch: 549508

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U	0.200	0.219		mg/L		110	75 - 125	0	20

Lab Sample ID: MB 460-550322/1-A
Matrix: Water
Analysis Batch: 550403

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 10:56	1

Lab Sample ID: LCS 460-550322/2-A
Matrix: Water
Analysis Batch: 550403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550322

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			0.100	0.102		mg/L		102	85 - 115		

Lab Sample ID: 460-163415-27 MS
Matrix: Water
Analysis Batch: 550403

Client Sample ID: SP-01-082718
Prep Type: Total/NA
Prep Batch: 550322

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.0020	U F2 F1	0.200	0.192		mg/L		96	75 - 125		

Lab Sample ID: 460-163415-27 MSD
Matrix: Water
Analysis Batch: 550403

Client Sample ID: SP-01-082718
Prep Type: Total/NA
Prep Batch: 550322

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U F2 F1	0.200	0.144	F2 F1	mg/L		72	75 - 125	29	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 460-548413/25
Matrix: Water
Analysis Batch: 548413

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/29/18 14:09	1
Alkalinity	5.0	U	5.0	5.0	mg/L			08/29/18 14:09	1

Lab Sample ID: LCSSRM 460-548413/26
Matrix: Water
Analysis Batch: 548413

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	384	364.8		mg/L		95.0	84.9 - 114.8

Lab Sample ID: 460-163415-3 DU
Matrix: Water
Analysis Batch: 548413

Client Sample ID: PMB-01A-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	150		150.5		mg/L		0.1	10
Alkalinity	150		150.5		mg/L		0.1	10

Lab Sample ID: MB 460-548864/2
Matrix: Water
Analysis Batch: 548864

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/30/18 15:08	1
Alkalinity	5.0	U	5.0	5.0	mg/L			08/30/18 15:08	1

Lab Sample ID: MB 460-548864/25
Matrix: Water
Analysis Batch: 548864

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/30/18 18:20	1
Alkalinity	5.0	U	5.0	5.0	mg/L			08/30/18 18:20	1

Lab Sample ID: LCSSRM 460-548864/26
Matrix: Water
Analysis Batch: 548864

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	384	364.8		mg/L		95.0	84.9 - 114.8

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSSRM 460-548864/3
Matrix: Water
Analysis Batch: 548864

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

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			384	363.0		mg/L		94.5	84.9 - 114.8		

Lab Sample ID: 460-163415-26 DU
Matrix: Water
Analysis Batch: 548864

Client Sample ID: SP-00-082718
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	25.2			25.08		mg/L				0.4	10
Alkalinity	25.2			25.08		mg/L				0.4	10

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Analysis Batch: 548531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-2	Dup-02-082718	Total/NA	Water	8260C	
460-163415-3	PMB-01A-082718	Total/NA	Water	8260C	
460-163415-4	PMB-02-082718	Total/NA	Water	8260C	
460-163415-5	PAB-03-082718	Total/NA	Water	8260C	
460-163415-6	PAB-02-082718	Total/NA	Water	8260C	
460-163415-7	MRB-02-082718	Total/NA	Water	8260C	
460-163415-8	MRB-03-082718	Total/NA	Water	8260C	
460-163415-9	NOB-01-082718	Total/NA	Water	8260C	
460-163415-11	PAB-01-082718	Total/NA	Water	8260C	
460-163415-12	SW-11-082718	Total/NA	Water	8260C	
460-163415-13	Dup-01-082718	Total/NA	Water	8260C	
460-163415-14	PAB-01A-082718	Total/NA	Water	8260C	
460-163415-15	PMP-POND-082718	Total/NA	Water	8260C	
MB 460-548531/8	Method Blank	Total/NA	Water	8260C	
LCS 460-548531/4	Lab Control Sample	Total/NA	Water	8260C	
460-163415-3 MS	PMB-01A-082718	Total/NA	Water	8260C	
460-163415-3 MSD	PMB-01A-082718	Total/NA	Water	8260C	

Analysis Batch: 548838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Total/NA	Water	8260C	
460-163415-19	SW-3-082718	Total/NA	Water	8260C	
460-163415-20	MRB-01-082718	Total/NA	Water	8260C	
460-163415-21	MRB-00-082718	Total/NA	Water	8260C	
460-163415-22	TB-01-082718	Total/NA	Water	8260C	
460-163415-23	RC-03-082718	Total/NA	Water	8260C	
460-163415-24	SW-04-082718	Total/NA	Water	8260C	
460-163415-26	SP-00-082718	Total/NA	Water	8260C	
460-163415-27	SP-01-082718	Total/NA	Water	8260C	
460-163415-28	RC-02-082718	Total/NA	Water	8260C	
460-163415-29	RC-01-082718	Total/NA	Water	8260C	
460-163415-30	PAB-03A-082718	Total/NA	Water	8260C	
460-163415-32	NOB-02-082718	Total/NA	Water	8260C	
460-163415-33	RM-01-082718	Total/NA	Water	8260C	
MB 460-548838/8	Method Blank	Total/NA	Water	8260C	
LCS 460-548838/3	Lab Control Sample	Total/NA	Water	8260C	
460-163415-26 MS	SP-00-082718	Total/NA	Water	8260C	
460-163415-26 MSD	SP-00-082718	Total/NA	Water	8260C	

Analysis Batch: 549013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-10	PAB-00-082718	Total/NA	Water	8260C	
460-163415-16	SR3-POND-082718	Total/NA	Water	8260C	
460-163415-17	SR3-Seep-01-082718	Total/NA	Water	8260C	
460-163415-18	SR3-Seep-02-082718	Total/NA	Water	8260C	
460-163415-25	SW-17-082718	Total/NA	Water	8260C	
460-163415-31	PAB-04-082718	Total/NA	Water	8260C	
460-163415-34	PMB-02A-082718	Total/NA	Water	8260C	
MB 460-549013/7	Method Blank	Total/NA	Water	8260C	
LCS 460-549013/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-549013/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 549340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Total/NA	Water	8260C SIM	
460-163415-2	Dup-02-082718	Total/NA	Water	8260C SIM	
460-163415-3	PMB-01A-082718	Total/NA	Water	8260C SIM	
460-163415-4	PMB-02-082718	Total/NA	Water	8260C SIM	
460-163415-5	PAB-03-082718	Total/NA	Water	8260C SIM	
460-163415-6	PAB-02-082718	Total/NA	Water	8260C SIM	
460-163415-7	MRB-02-082718	Total/NA	Water	8260C SIM	
460-163415-8	MRB-03-082718	Total/NA	Water	8260C SIM	
460-163415-9	NOB-01-082718	Total/NA	Water	8260C SIM	
460-163415-10	PAB-00-082718	Total/NA	Water	8260C SIM	
460-163415-11	PAB-01-082718	Total/NA	Water	8260C SIM	
460-163415-12	SW-11-082718	Total/NA	Water	8260C SIM	
460-163415-13	Dup-01-082718	Total/NA	Water	8260C SIM	
460-163415-14	PAB-01A-082718	Total/NA	Water	8260C SIM	
460-163415-15	PMP-POND-082718	Total/NA	Water	8260C SIM	
460-163415-16	SR3-POND-082718	Total/NA	Water	8260C SIM	
460-163415-17	SR3-Seep-01-082718	Total/NA	Water	8260C SIM	
460-163415-18	SR3-Seep-02-082718	Total/NA	Water	8260C SIM	
MB 460-549340/9	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-549340/4	Lab Control Sample	Total/NA	Water	8260C SIM	
460-163415-3 MS	PMB-01A-082718	Total/NA	Water	8260C SIM	
460-163415-3 MSD	PMB-01A-082718	Total/NA	Water	8260C SIM	

Analysis Batch: 550072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-19	SW-3-082718	Total/NA	Water	8260C SIM	
460-163415-21	MRB-00-082718	Total/NA	Water	8260C SIM	
460-163415-22	TB-01-082718	Total/NA	Water	8260C SIM	
460-163415-23	RC-03-082718	Total/NA	Water	8260C SIM	
460-163415-29	RC-01-082718	Total/NA	Water	8260C SIM	
460-163415-30	PAB-03A-082718	Total/NA	Water	8260C SIM	
460-163415-31	PAB-04-082718	Total/NA	Water	8260C SIM	
460-163415-32	NOB-02-082718	Total/NA	Water	8260C SIM	
460-163415-33	RM-01-082718	Total/NA	Water	8260C SIM	
460-163415-34	PMB-02A-082718	Total/NA	Water	8260C SIM	
MB 460-550072/9	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-550072/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-550072/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Analysis Batch: 550785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-20	MRB-01-082718	Total/NA	Water	8260C SIM	
460-163415-24	SW-04-082718	Total/NA	Water	8260C SIM	
460-163415-25	SW-17-082718	Total/NA	Water	8260C SIM	
460-163415-26	SP-00-082718	Total/NA	Water	8260C SIM	
460-163415-27	SP-01-082718	Total/NA	Water	8260C SIM	
460-163415-28	RC-02-082718	Total/NA	Water	8260C SIM	
MB 460-550785/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-550785/4	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-550785/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
460-163415-26 MS	SP-00-082718	Total/NA	Water	8260C SIM	
460-163415-26 MSD	SP-00-082718	Total/NA	Water	8260C SIM	

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Prep Batch: 548292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Total/NA	Water	3510C	
460-163415-2	Dup-02-082718	Total/NA	Water	3510C	
460-163415-3	PMB-01A-082718	Total/NA	Water	3510C	
460-163415-4	PMB-02-082718	Total/NA	Water	3510C	
460-163415-5	PAB-03-082718	Total/NA	Water	3510C	
460-163415-6	PAB-02-082718	Total/NA	Water	3510C	
460-163415-7	MRB-02-082718	Total/NA	Water	3510C	
460-163415-8	MRB-03-082718	Total/NA	Water	3510C	
460-163415-9	NOB-01-082718	Total/NA	Water	3510C	
460-163415-10	PAB-00-082718	Total/NA	Water	3510C	
460-163415-11	PAB-01-082718	Total/NA	Water	3510C	
460-163415-12	SW-11-082718	Total/NA	Water	3510C	
460-163415-13	Dup-01-082718	Total/NA	Water	3510C	
460-163415-14	PAB-01A-082718	Total/NA	Water	3510C	
460-163415-15	PMP-POND-082718	Total/NA	Water	3510C	
460-163415-16	SR3-POND-082718	Total/NA	Water	3510C	
460-163415-17	SR3-Seep-01-082718	Total/NA	Water	3510C	
460-163415-18	SR3-Seep-02-082718	Total/NA	Water	3510C	
460-163415-19	SW-3-082718	Total/NA	Water	3510C	
460-163415-20	MRB-01-082718	Total/NA	Water	3510C	
MB 460-548292/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-548292/2-A	Lab Control Sample	Total/NA	Water	3510C	
460-163415-3 MS	PMB-01A-082718	Total/NA	Water	3510C	
460-163415-3 MSD	PMB-01A-082718	Total/NA	Water	3510C	

Prep Batch: 548293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-21	MRB-00-082718	Total/NA	Water	3510C	
460-163415-23	RC-03-082718	Total/NA	Water	3510C	
460-163415-24	SW-04-082718	Total/NA	Water	3510C	
460-163415-25	SW-17-082718	Total/NA	Water	3510C	
460-163415-26	SP-00-082718	Total/NA	Water	3510C	
460-163415-27	SP-01-082718	Total/NA	Water	3510C	
460-163415-28	RC-02-082718	Total/NA	Water	3510C	
460-163415-29	RC-01-082718	Total/NA	Water	3510C	
460-163415-30	PAB-03A-082718	Total/NA	Water	3510C	
460-163415-31	PAB-04-082718	Total/NA	Water	3510C	
460-163415-32	NOB-02-082718	Total/NA	Water	3510C	
460-163415-33	RM-01-082718	Total/NA	Water	3510C	
460-163415-34	PMB-02A-082718	Total/NA	Water	3510C	
MB 460-548293/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-548293/2-A	Lab Control Sample	Total/NA	Water	3510C	
460-163415-26 MS	SP-00-082718	Total/NA	Water	3510C	
460-163415-26 MSD	SP-00-082718	Total/NA	Water	3510C	

Analysis Batch: 548453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-2	Dup-02-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-3	PMB-01A-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-4	PMB-02-082718	Total/NA	Water	8270D SIM ID	548292

GC/MS Semi VOA (Continued)

Analysis Batch: 548453 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-5	PAB-03-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-6	PAB-02-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-7	MRB-02-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-8	MRB-03-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-9	NOB-01-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-10	PAB-00-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-11	PAB-01-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-12	SW-11-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-13	Dup-01-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-14	PAB-01A-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-15	PMP-POND-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-16	SR3-POND-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-17	SR3-Seep-01-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-18	SR3-Seep-02-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-19	SW-3-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-20	MRB-01-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-21	MRB-00-082718	Total/NA	Water	8270D SIM ID	548293
460-163415-23	RC-03-082718	Total/NA	Water	8270D SIM ID	548293
460-163415-24	SW-04-082718	Total/NA	Water	8270D SIM ID	548293
460-163415-25	SW-17-082718	Total/NA	Water	8270D SIM ID	548293
460-163415-26	SP-00-082718	Total/NA	Water	8270D SIM ID	548293
460-163415-27	SP-01-082718	Total/NA	Water	8270D SIM ID	548293
460-163415-28	RC-02-082718	Total/NA	Water	8270D SIM ID	548293
460-163415-29	RC-01-082718	Total/NA	Water	8270D SIM ID	548293
460-163415-30	PAB-03A-082718	Total/NA	Water	8270D SIM ID	548293
460-163415-31	PAB-04-082718	Total/NA	Water	8270D SIM ID	548293
MB 460-548292/1-A	Method Blank	Total/NA	Water	8270D SIM ID	548292
MB 460-548293/1-A	Method Blank	Total/NA	Water	8270D SIM ID	548293
LCS 460-548292/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	548292
LCS 460-548293/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	548293
460-163415-3 MS	PMB-01A-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-3 MSD	PMB-01A-082718	Total/NA	Water	8270D SIM ID	548292
460-163415-26 MS	SP-00-082718	Total/NA	Water	8270D SIM ID	548293
460-163415-26 MSD	SP-00-082718	Total/NA	Water	8270D SIM ID	548293

Analysis Batch: 548593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-32	NOB-02-082718	Total/NA	Water	8270D SIM ID	548293
460-163415-33	RM-01-082718	Total/NA	Water	8270D SIM ID	548293
460-163415-34	PMB-02A-082718	Total/NA	Water	8270D SIM ID	548293

HPLC/IC

Analysis Batch: 548204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Total/NA	Water	9056A	
460-163415-2	Dup-02-082718	Total/NA	Water	9056A	
460-163415-3	PMB-01A-082718	Total/NA	Water	9056A	
460-163415-4	PMB-02-082718	Total/NA	Water	9056A	
460-163415-5	PAB-03-082718	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 548204 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-6	PAB-02-082718	Total/NA	Water	9056A	
460-163415-7	MRB-02-082718	Total/NA	Water	9056A	
460-163415-8	MRB-03-082718	Total/NA	Water	9056A	
460-163415-9	NOB-01-082718	Total/NA	Water	9056A	
460-163415-10	PAB-00-082718	Total/NA	Water	9056A	
460-163415-11	PAB-01-082718	Total/NA	Water	9056A	
460-163415-14	PAB-01A-082718	Total/NA	Water	9056A	
460-163415-15	PMP-POND-082718	Total/NA	Water	9056A	
460-163415-16	SR3-POND-082718	Total/NA	Water	9056A	
460-163415-17	SR3-Seep-01-082718	Total/NA	Water	9056A	
460-163415-18	SR3-Seep-02-082718	Total/NA	Water	9056A	
460-163415-19	SW-3-082718	Total/NA	Water	9056A	
460-163415-20	MRB-01-082718	Total/NA	Water	9056A	
MB 460-548204/3	Method Blank	Total/NA	Water	9056A	
LCS 460-548204/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-548204/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163415-3 MS	PMB-01A-082718	Total/NA	Water	9056A	
460-163415-3 MSD	PMB-01A-082718	Total/NA	Water	9056A	
460-163415-11 MS	PAB-01-082718	Total/NA	Water	9056A	
460-163415-11 MSD	PAB-01-082718	Total/NA	Water	9056A	
460-163415-3 DU	PMB-01A-082718	Total/NA	Water	9056A	
460-163415-11 DU	PAB-01-082718	Total/NA	Water	9056A	

Analysis Batch: 548207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-21	MRB-00-082718	Total/NA	Water	9056A	
460-163415-23	RC-03-082718	Total/NA	Water	9056A	
460-163415-24	SW-04-082718	Total/NA	Water	9056A	
460-163415-25	SW-17-082718	Total/NA	Water	9056A	
460-163415-26	SP-00-082718	Total/NA	Water	9056A	
460-163415-27	SP-01-082718	Total/NA	Water	9056A	
460-163415-28	RC-02-082718	Total/NA	Water	9056A	
460-163415-29	RC-01-082718	Total/NA	Water	9056A	
460-163415-30	PAB-03A-082718	Total/NA	Water	9056A	
460-163415-31	PAB-04-082718	Total/NA	Water	9056A	
460-163415-32	NOB-02-082718	Total/NA	Water	9056A	
460-163415-33	RM-01-082718	Total/NA	Water	9056A	
460-163415-34	PMB-02A-082718	Total/NA	Water	9056A	
MB 460-548207/3	Method Blank	Total/NA	Water	9056A	
LCS 460-548207/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-548207/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163415-26 MS	SP-00-082718	Total/NA	Water	9056A	
460-163415-26 MSD	SP-00-082718	Total/NA	Water	9056A	
460-163415-32 MS	NOB-02-082718	Total/NA	Water	9056A	
460-163415-32 MSD	NOB-02-082718	Total/NA	Water	9056A	
460-163415-26 DU	SP-00-082718	Total/NA	Water	9056A	
460-163415-32 DU	NOB-02-082718	Total/NA	Water	9056A	

Analysis Batch: 548646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1 - DL	PMB-01-082718	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 548646 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-2 - DL	Dup-02-082718	Total/NA	Water	9056A	
460-163415-3 - DL	PMB-01A-082718	Total/NA	Water	9056A	
460-163415-4 - DL	PMB-02-082718	Total/NA	Water	9056A	
460-163415-8 - DL	MRB-03-082718	Total/NA	Water	9056A	
460-163415-12	SW-11-082718	Total/NA	Water	9056A	
460-163415-13	Dup-01-082718	Total/NA	Water	9056A	
460-163415-19 - DL	SW-3-082718	Total/NA	Water	9056A	
MB 460-548646/3	Method Blank	Total/NA	Water	9056A	
LCS 460-548646/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-548646/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163415-3 MS - DL	PMB-01A-082718	Total/NA	Water	9056A	
460-163415-3 MSD - DL	PMB-01A-082718	Total/NA	Water	9056A	
460-163415-3 DU - DL	PMB-01A-082718	Total/NA	Water	9056A	

Analysis Batch: 549036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-23 - DL	RC-03-082718	Total/NA	Water	9056A	
460-163415-24 - DL	SW-04-082718	Total/NA	Water	9056A	
460-163415-25 - DL	SW-17-082718	Total/NA	Water	9056A	
460-163415-26 - DL	SP-00-082718	Total/NA	Water	9056A	
460-163415-27 - DL	SP-01-082718	Total/NA	Water	9056A	
460-163415-28 - DL	RC-02-082718	Total/NA	Water	9056A	
460-163415-29 - DL	RC-01-082718	Total/NA	Water	9056A	
460-163415-33 - DL	RM-01-082718	Total/NA	Water	9056A	
460-163415-34 - DL	PMB-02A-082718	Total/NA	Water	9056A	
MB 460-549036/3	Method Blank	Total/NA	Water	9056A	
LCS 460-549036/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-549036/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163415-26 MS - DL	SP-00-082718	Total/NA	Water	9056A	
460-163415-26 MSD - DL	SP-00-082718	Total/NA	Water	9056A	
460-163415-26 DU - DL	SP-00-082718	Total/NA	Water	9056A	

Metals

Filtration Batch: 548960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Dissolved	Water	FILTRATION	
460-163415-2	Dup-02-082718	Dissolved	Water	FILTRATION	
460-163415-3	PMB-01A-082718	Dissolved	Water	FILTRATION	
460-163415-4	PMB-02-082718	Dissolved	Water	FILTRATION	
460-163415-5	PAB-03-082718	Dissolved	Water	FILTRATION	
460-163415-6	PAB-02-082718	Dissolved	Water	FILTRATION	
460-163415-7	MRB-02-082718	Dissolved	Water	FILTRATION	
460-163415-8	MRB-03-082718	Dissolved	Water	FILTRATION	
460-163415-9	NOB-01-082718	Dissolved	Water	FILTRATION	
460-163415-10	PAB-00-082718	Dissolved	Water	FILTRATION	
460-163415-11	PAB-01-082718	Dissolved	Water	FILTRATION	
460-163415-12	SW-11-082718	Dissolved	Water	FILTRATION	
460-163415-13	Dup-01-082718	Dissolved	Water	FILTRATION	
460-163415-14	PAB-01A-082718	Dissolved	Water	FILTRATION	

Metals (Continued)

Filtration Batch: 548960 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-15	PMP-POND-082718	Dissolved	Water	FILTRATION	
460-163415-16	SR3-POND-082718	Dissolved	Water	FILTRATION	
460-163415-17	SR3-Seep-01-082718	Dissolved	Water	FILTRATION	
460-163415-18	SR3-Seep-02-082718	Dissolved	Water	FILTRATION	
460-163415-19	SW-3-082718	Dissolved	Water	FILTRATION	
460-163415-20	MRB-01-082718	Dissolved	Water	FILTRATION	
MB 460-548960/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163415-3 MS	PMB-01A-082718	Dissolved	Water	FILTRATION	
460-163415-3 DU	PMB-01A-082718	Dissolved	Water	FILTRATION	

Prep Batch: 548961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Total/NA	Water	7470A	
460-163415-2	Dup-02-082718	Total/NA	Water	7470A	
460-163415-3	PMB-01A-082718	Total/NA	Water	7470A	
460-163415-4	PMB-02-082718	Total/NA	Water	7470A	
460-163415-5	PAB-03-082718	Total/NA	Water	7470A	
460-163415-6	PAB-02-082718	Total/NA	Water	7470A	
460-163415-7	MRB-02-082718	Total/NA	Water	7470A	
460-163415-8	MRB-03-082718	Total/NA	Water	7470A	
460-163415-9	NOB-01-082718	Total/NA	Water	7470A	
460-163415-10	PAB-00-082718	Total/NA	Water	7470A	
460-163415-11	PAB-01-082718	Total/NA	Water	7470A	
460-163415-12	SW-11-082718	Total/NA	Water	7470A	
460-163415-13	Dup-01-082718	Total/NA	Water	7470A	
460-163415-14	PAB-01A-082718	Total/NA	Water	7470A	
460-163415-15	PMP-POND-082718	Total/NA	Water	7470A	
460-163415-16	SR3-POND-082718	Total/NA	Water	7470A	
460-163415-17	SR3-Seep-01-082718	Total/NA	Water	7470A	
MB 460-548961/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-548961/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163415-3 MS	PMB-01A-082718	Total/NA	Water	7470A	
460-163415-3 DU	PMB-01A-082718	Total/NA	Water	7470A	

Prep Batch: 548966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Dissolved	Water	7470A	548960
460-163415-2	Dup-02-082718	Dissolved	Water	7470A	548960
460-163415-3	PMB-01A-082718	Dissolved	Water	7470A	548960
460-163415-4	PMB-02-082718	Dissolved	Water	7470A	548960
460-163415-5	PAB-03-082718	Dissolved	Water	7470A	548960
460-163415-6	PAB-02-082718	Dissolved	Water	7470A	548960
460-163415-7	MRB-02-082718	Dissolved	Water	7470A	548960
460-163415-8	MRB-03-082718	Dissolved	Water	7470A	548960
460-163415-9	NOB-01-082718	Dissolved	Water	7470A	548960
460-163415-10	PAB-00-082718	Dissolved	Water	7470A	548960
460-163415-11	PAB-01-082718	Dissolved	Water	7470A	548960
460-163415-12	SW-11-082718	Dissolved	Water	7470A	548960
460-163415-13	Dup-01-082718	Dissolved	Water	7470A	548960
460-163415-14	PAB-01A-082718	Dissolved	Water	7470A	548960
460-163415-15	PMP-POND-082718	Dissolved	Water	7470A	548960

Metals (Continued)

Prep Batch: 548966 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-16	SR3-POND-082718	Dissolved	Water	7470A	548960
460-163415-17	SR3-Seep-01-082718	Dissolved	Water	7470A	548960
460-163415-18	SR3-Seep-02-082718	Dissolved	Water	7470A	548960
460-163415-19	SW-3-082718	Dissolved	Water	7470A	548960
460-163415-20	MRB-01-082718	Dissolved	Water	7470A	548960
MB 460-548960/1-B	Method Blank	Dissolved	Water	7470A	548960
LCS 460-548966/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163415-3 MS	PMB-01A-082718	Dissolved	Water	7470A	548960
460-163415-3 DU	PMB-01A-082718	Dissolved	Water	7470A	548960

Analysis Batch: 549004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Dissolved	Water	7470A	548966
460-163415-1	PMB-01-082718	Total/NA	Water	7470A	548961
460-163415-2	Dup-02-082718	Dissolved	Water	7470A	548966
460-163415-2	Dup-02-082718	Total/NA	Water	7470A	548961
460-163415-3	PMB-01A-082718	Dissolved	Water	7470A	548966
460-163415-3	PMB-01A-082718	Total/NA	Water	7470A	548961
460-163415-4	PMB-02-082718	Dissolved	Water	7470A	548966
460-163415-4	PMB-02-082718	Total/NA	Water	7470A	548961
460-163415-5	PAB-03-082718	Dissolved	Water	7470A	548966
460-163415-5	PAB-03-082718	Total/NA	Water	7470A	548961
460-163415-6	PAB-02-082718	Dissolved	Water	7470A	548966
460-163415-6	PAB-02-082718	Total/NA	Water	7470A	548961
460-163415-7	MRB-02-082718	Dissolved	Water	7470A	548966
460-163415-7	MRB-02-082718	Total/NA	Water	7470A	548961
460-163415-8	MRB-03-082718	Dissolved	Water	7470A	548966
460-163415-8	MRB-03-082718	Total/NA	Water	7470A	548961
460-163415-9	NOB-01-082718	Dissolved	Water	7470A	548966
460-163415-9	NOB-01-082718	Total/NA	Water	7470A	548961
460-163415-10	PAB-00-082718	Dissolved	Water	7470A	548966
460-163415-10	PAB-00-082718	Total/NA	Water	7470A	548961
460-163415-11	PAB-01-082718	Dissolved	Water	7470A	548966
460-163415-11	PAB-01-082718	Total/NA	Water	7470A	548961
460-163415-12	SW-11-082718	Dissolved	Water	7470A	548966
460-163415-12	SW-11-082718	Total/NA	Water	7470A	548961
460-163415-13	Dup-01-082718	Dissolved	Water	7470A	548966
460-163415-13	Dup-01-082718	Total/NA	Water	7470A	548961
460-163415-14	PAB-01A-082718	Dissolved	Water	7470A	548966
460-163415-14	PAB-01A-082718	Total/NA	Water	7470A	548961
460-163415-15	PMP-POND-082718	Dissolved	Water	7470A	548966
460-163415-15	PMP-POND-082718	Total/NA	Water	7470A	548961
460-163415-16	SR3-POND-082718	Dissolved	Water	7470A	548966
460-163415-16	SR3-POND-082718	Total/NA	Water	7470A	548961
460-163415-17	SR3-Seep-01-082718	Dissolved	Water	7470A	548966
460-163415-17	SR3-Seep-01-082718	Total/NA	Water	7470A	548961
460-163415-18	SR3-Seep-02-082718	Dissolved	Water	7470A	548966
460-163415-19	SW-3-082718	Dissolved	Water	7470A	548966
460-163415-20	MRB-01-082718	Dissolved	Water	7470A	548966
MB 460-548960/1-B	Method Blank	Dissolved	Water	7470A	548966
MB 460-548961/1-A	Method Blank	Total/NA	Water	7470A	548961

Metals (Continued)

Analysis Batch: 549004 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-548961/2-A	Lab Control Sample	Total/NA	Water	7470A	548961
LCS 460-548966/2-A	Lab Control Sample	Total/NA	Water	7470A	548966
460-163415-3 MS	PMB-01A-082718	Dissolved	Water	7470A	548966
460-163415-3 MS	PMB-01A-082718	Total/NA	Water	7470A	548961
460-163415-3 DU	PMB-01A-082718	Dissolved	Water	7470A	548966
460-163415-3 DU	PMB-01A-082718	Total/NA	Water	7470A	548961

Filtration Batch: 549449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-21	MRB-00-082718	Dissolved	Water	FILTRATION	
460-163415-23	RC-03-082718	Dissolved	Water	FILTRATION	
460-163415-24	SW-04-082718	Dissolved	Water	FILTRATION	
460-163415-25	SW-17-082718	Dissolved	Water	FILTRATION	
460-163415-26	SP-00-082718	Dissolved	Water	FILTRATION	
460-163415-27	SP-01-082718	Dissolved	Water	FILTRATION	
460-163415-28	RC-02-082718	Dissolved	Water	FILTRATION	
460-163415-29	RC-01-082718	Dissolved	Water	FILTRATION	
460-163415-30	PAB-03A-082718	Dissolved	Water	FILTRATION	
460-163415-31	PAB-04-082718	Dissolved	Water	FILTRATION	
460-163415-32	NOB-02-082718	Dissolved	Water	FILTRATION	
460-163415-33	RM-01-082718	Dissolved	Water	FILTRATION	
460-163415-34	PMB-02A-082718	Dissolved	Water	FILTRATION	
MB 460-549449/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163415-26 MS	SP-00-082718	Dissolved	Water	FILTRATION	
460-163415-26 DU	SP-00-082718	Dissolved	Water	FILTRATION	

Prep Batch: 549450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-18	SR3-Seep-02-082718	Total/NA	Water	7470A	
460-163415-19	SW-3-082718	Total/NA	Water	7470A	
460-163415-20	MRB-01-082718	Total/NA	Water	7470A	
460-163415-21	MRB-00-082718	Total/NA	Water	7470A	
460-163415-23	RC-03-082718	Total/NA	Water	7470A	
460-163415-24	SW-04-082718	Total/NA	Water	7470A	
460-163415-26	SP-00-082718	Total/NA	Water	7470A	
460-163415-27	SP-01-082718	Total/NA	Water	7470A	
460-163415-28	RC-02-082718	Total/NA	Water	7470A	
460-163415-29	RC-01-082718	Total/NA	Water	7470A	
460-163415-30	PAB-03A-082718	Total/NA	Water	7470A	
460-163415-31	PAB-04-082718	Total/NA	Water	7470A	
460-163415-32	NOB-02-082718	Total/NA	Water	7470A	
460-163415-33	RM-01-082718	Total/NA	Water	7470A	
460-163415-34	PMB-02A-082718	Total/NA	Water	7470A	
MB 460-549450/13-A	Method Blank	Total/NA	Water	7470A	
LCS 460-549450/14-A	Lab Control Sample	Total/NA	Water	7470A	
460-163415-26 MS	SP-00-082718	Total/NA	Water	7470A	
460-163415-26 DU	SP-00-082718	Total/NA	Water	7470A	

Prep Batch: 549452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-21	MRB-00-082718	Dissolved	Water	7470A	549449

Metals (Continued)

Prep Batch: 549452 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-23	RC-03-082718	Dissolved	Water	7470A	549449
460-163415-24	SW-04-082718	Dissolved	Water	7470A	549449
460-163415-25	SW-17-082718	Dissolved	Water	7470A	549449
460-163415-26	SP-00-082718	Dissolved	Water	7470A	549449
460-163415-27	SP-01-082718	Dissolved	Water	7470A	549449
460-163415-28	RC-02-082718	Dissolved	Water	7470A	549449
460-163415-29	RC-01-082718	Dissolved	Water	7470A	549449
460-163415-30	PAB-03A-082718	Dissolved	Water	7470A	549449
460-163415-31	PAB-04-082718	Dissolved	Water	7470A	549449
460-163415-32	NOB-02-082718	Dissolved	Water	7470A	549449
460-163415-33	RM-01-082718	Dissolved	Water	7470A	549449
460-163415-34	PMB-02A-082718	Dissolved	Water	7470A	549449
MB 460-549449/1-B	Method Blank	Dissolved	Water	7470A	549449
LCS 460-549452/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163415-26 MS	SP-00-082718	Dissolved	Water	7470A	549449
460-163415-26 DU	SP-00-082718	Dissolved	Water	7470A	549449

Prep Batch: 549464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-25	SW-17-082718	Total/NA	Water	7470A	
MB 460-549464/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-549464/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163051-G-1-C MS	Matrix Spike	Total/NA	Water	7470A	
460-163051-G-1-B DU	Duplicate	Total/NA	Water	7470A	

Filtration Batch: 549516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Dissolved	Water	FILTRATION	
460-163415-2	Dup-02-082718	Dissolved	Water	FILTRATION	
460-163415-3	PMB-01A-082718	Dissolved	Water	FILTRATION	
460-163415-4	PMB-02-082718	Dissolved	Water	FILTRATION	
460-163415-5	PAB-03-082718	Dissolved	Water	FILTRATION	
460-163415-6	PAB-02-082718	Dissolved	Water	FILTRATION	
460-163415-7	MRB-02-082718	Dissolved	Water	FILTRATION	
460-163415-8	MRB-03-082718	Dissolved	Water	FILTRATION	
460-163415-9	NOB-01-082718	Dissolved	Water	FILTRATION	
460-163415-10	PAB-00-082718	Dissolved	Water	FILTRATION	
460-163415-11	PAB-01-082718	Dissolved	Water	FILTRATION	
460-163415-12	SW-11-082718	Dissolved	Water	FILTRATION	
460-163415-13	Dup-01-082718	Dissolved	Water	FILTRATION	
460-163415-14	PAB-01A-082718	Dissolved	Water	FILTRATION	
460-163415-15	PMP-POND-082718	Dissolved	Water	FILTRATION	
460-163415-16	SR3-POND-082718	Dissolved	Water	FILTRATION	
460-163415-17	SR3-Seep-01-082718	Dissolved	Water	FILTRATION	
460-163415-18	SR3-Seep-02-082718	Dissolved	Water	FILTRATION	
460-163415-19	SW-3-082718	Dissolved	Water	FILTRATION	
460-163415-20	MRB-01-082718	Dissolved	Water	FILTRATION	
MB 460-549516/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163415-3 MS	PMB-01A-082718	Dissolved	Water	FILTRATION	
460-163415-3 DU	PMB-01A-082718	Dissolved	Water	FILTRATION	

Metals (Continued)

Filtration Batch: 549517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-21	MRB-00-082718	Dissolved	Water	FILTRATION	
460-163415-23	RC-03-082718	Dissolved	Water	FILTRATION	
460-163415-24	SW-04-082718	Dissolved	Water	FILTRATION	
460-163415-25	SW-17-082718	Dissolved	Water	FILTRATION	
460-163415-26	SP-00-082718	Dissolved	Water	FILTRATION	
460-163415-27	SP-01-082718	Dissolved	Water	FILTRATION	
460-163415-28	RC-02-082718	Dissolved	Water	FILTRATION	
460-163415-29	RC-01-082718	Dissolved	Water	FILTRATION	
460-163415-30	PAB-03A-082718	Dissolved	Water	FILTRATION	
460-163415-31	PAB-04-082718	Dissolved	Water	FILTRATION	
460-163415-32	NOB-02-082718	Dissolved	Water	FILTRATION	
460-163415-33	RM-01-082718	Dissolved	Water	FILTRATION	
460-163415-34	PMB-02A-082718	Dissolved	Water	FILTRATION	
MB 460-549517/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163415-26 MS	SP-00-082718	Dissolved	Water	FILTRATION	
460-163415-26 DU	SP-00-082718	Dissolved	Water	FILTRATION	

Analysis Batch: 549548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-18	SR3-Seep-02-082718	Total/NA	Water	7470A	549450
460-163415-19	SW-3-082718	Total/NA	Water	7470A	549450
460-163415-20	MRB-01-082718	Total/NA	Water	7470A	549450
460-163415-21	MRB-00-082718	Dissolved	Water	7470A	549452
460-163415-21	MRB-00-082718	Total/NA	Water	7470A	549450
460-163415-23	RC-03-082718	Dissolved	Water	7470A	549452
460-163415-23	RC-03-082718	Total/NA	Water	7470A	549450
460-163415-24	SW-04-082718	Dissolved	Water	7470A	549452
460-163415-24	SW-04-082718	Total/NA	Water	7470A	549450
460-163415-25	SW-17-082718	Dissolved	Water	7470A	549452
460-163415-25	SW-17-082718	Total/NA	Water	7470A	549464
460-163415-26	SP-00-082718	Dissolved	Water	7470A	549452
460-163415-26	SP-00-082718	Total/NA	Water	7470A	549450
460-163415-27	SP-01-082718	Dissolved	Water	7470A	549452
460-163415-27	SP-01-082718	Total/NA	Water	7470A	549450
460-163415-28	RC-02-082718	Dissolved	Water	7470A	549452
460-163415-28	RC-02-082718	Total/NA	Water	7470A	549450
460-163415-29	RC-01-082718	Dissolved	Water	7470A	549452
460-163415-29	RC-01-082718	Total/NA	Water	7470A	549450
460-163415-30	PAB-03A-082718	Dissolved	Water	7470A	549452
460-163415-30	PAB-03A-082718	Total/NA	Water	7470A	549450
460-163415-31	PAB-04-082718	Dissolved	Water	7470A	549452
460-163415-31	PAB-04-082718	Total/NA	Water	7470A	549450
460-163415-32	NOB-02-082718	Dissolved	Water	7470A	549452
460-163415-32	NOB-02-082718	Total/NA	Water	7470A	549450
460-163415-33	RM-01-082718	Dissolved	Water	7470A	549452
460-163415-33	RM-01-082718	Total/NA	Water	7470A	549450
460-163415-34	PMB-02A-082718	Dissolved	Water	7470A	549452
460-163415-34	PMB-02A-082718	Total/NA	Water	7470A	549450
MB 460-549449/1-B	Method Blank	Dissolved	Water	7470A	549452
MB 460-549450/13-A	Method Blank	Total/NA	Water	7470A	549450
MB 460-549464/1-A	Method Blank	Total/NA	Water	7470A	549464

Metals (Continued)

Analysis Batch: 549548 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-549450/14-A	Lab Control Sample	Total/NA	Water	7470A	549450
LCS 460-549452/2-A	Lab Control Sample	Total/NA	Water	7470A	549452
LCS 460-549464/2-A	Lab Control Sample	Total/NA	Water	7470A	549464
460-163051-G-1-C MS	Matrix Spike	Total/NA	Water	7470A	549464
460-163415-26 MS	SP-00-082718	Dissolved	Water	7470A	549452
460-163415-26 MS	SP-00-082718	Total/NA	Water	7470A	549450
460-163051-G-1-B DU	Duplicate	Total/NA	Water	7470A	549464
460-163415-26 DU	SP-00-082718	Dissolved	Water	7470A	549452
460-163415-26 DU	SP-00-082718	Total/NA	Water	7470A	549450

Analysis Batch: 549568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Dissolved	Water	6020B	549692
460-163415-2	Dup-02-082718	Dissolved	Water	6020B	549692
460-163415-3	PMB-01A-082718	Dissolved	Water	6020B	549692
460-163415-4	PMB-02-082718	Dissolved	Water	6020B	549692
460-163415-5	PAB-03-082718	Dissolved	Water	6020B	549692
460-163415-6	PAB-02-082718	Dissolved	Water	6020B	549692
460-163415-7	MRB-02-082718	Dissolved	Water	6020B	549692
460-163415-8	MRB-03-082718	Dissolved	Water	6020B	549692
460-163415-9	NOB-01-082718	Dissolved	Water	6020B	549692
460-163415-10	PAB-00-082718	Dissolved	Water	6020B	549692
460-163415-11	PAB-01-082718	Dissolved	Water	6020B	549692
460-163415-12	SW-11-082718	Dissolved	Water	6020B	549692
460-163415-13	Dup-01-082718	Dissolved	Water	6020B	549692
460-163415-14	PAB-01A-082718	Dissolved	Water	6020B	549692
460-163415-15	PMP-POND-082718	Dissolved	Water	6020B	549692
460-163415-16	SR3-POND-082718	Dissolved	Water	6020B	549692
460-163415-17	SR3-Seep-01-082718	Dissolved	Water	6020B	549692
460-163415-18	SR3-Seep-02-082718	Dissolved	Water	6020B	549692
460-163415-19	SW-3-082718	Dissolved	Water	6020B	549692
460-163415-20	MRB-01-082718	Dissolved	Water	6020B	549692
MB 460-549516/1-B	Method Blank	Dissolved	Water	6020B	549692
LCS 460-549692/2-A	Lab Control Sample	Total/NA	Water	6020B	549692
460-163415-3 MS	PMB-01A-082718	Dissolved	Water	6020B	549692
460-163415-3 DU	PMB-01A-082718	Dissolved	Water	6020B	549692

Prep Batch: 549692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Dissolved	Water	3010A	549516
460-163415-2	Dup-02-082718	Dissolved	Water	3010A	549516
460-163415-3	PMB-01A-082718	Dissolved	Water	3010A	549516
460-163415-4	PMB-02-082718	Dissolved	Water	3010A	549516
460-163415-5	PAB-03-082718	Dissolved	Water	3010A	549516
460-163415-6	PAB-02-082718	Dissolved	Water	3010A	549516
460-163415-7	MRB-02-082718	Dissolved	Water	3010A	549516
460-163415-8	MRB-03-082718	Dissolved	Water	3010A	549516
460-163415-9	NOB-01-082718	Dissolved	Water	3010A	549516
460-163415-10	PAB-00-082718	Dissolved	Water	3010A	549516
460-163415-11	PAB-01-082718	Dissolved	Water	3010A	549516
460-163415-12	SW-11-082718	Dissolved	Water	3010A	549516

Metals (Continued)

Prep Batch: 549692 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-13	Dup-01-082718	Dissolved	Water	3010A	549516
460-163415-14	PAB-01A-082718	Dissolved	Water	3010A	549516
460-163415-15	PMP-POND-082718	Dissolved	Water	3010A	549516
460-163415-16	SR3-POND-082718	Dissolved	Water	3010A	549516
460-163415-17	SR3-Seep-01-082718	Dissolved	Water	3010A	549516
460-163415-18	SR3-Seep-02-082718	Dissolved	Water	3010A	549516
460-163415-19	SW-3-082718	Dissolved	Water	3010A	549516
460-163415-20	MRB-01-082718	Dissolved	Water	3010A	549516
MB 460-549516/1-B	Method Blank	Dissolved	Water	3010A	549516
LCS 460-549692/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-163415-3 MS	PMB-01A-082718	Dissolved	Water	3010A	549516
460-163415-3 DU	PMB-01A-082718	Dissolved	Water	3010A	549516

Prep Batch: 549696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-21	MRB-00-082718	Dissolved	Water	3010A	549517
460-163415-23	RC-03-082718	Dissolved	Water	3010A	549517
460-163415-24	SW-04-082718	Dissolved	Water	3010A	549517
460-163415-25	SW-17-082718	Dissolved	Water	3010A	549517
460-163415-26	SP-00-082718	Dissolved	Water	3010A	549517
460-163415-27	SP-01-082718	Dissolved	Water	3010A	549517
460-163415-28	RC-02-082718	Dissolved	Water	3010A	549517
460-163415-29	RC-01-082718	Dissolved	Water	3010A	549517
460-163415-30	PAB-03A-082718	Dissolved	Water	3010A	549517
460-163415-31	PAB-04-082718	Dissolved	Water	3010A	549517
460-163415-32	NOB-02-082718	Dissolved	Water	3010A	549517
460-163415-33	RM-01-082718	Dissolved	Water	3010A	549517
460-163415-34	PMB-02A-082718	Dissolved	Water	3010A	549517
MB 460-549517/1-B	Method Blank	Dissolved	Water	3010A	549517
LCS 460-549696/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-163415-26 MS	SP-00-082718	Dissolved	Water	3010A	549517
460-163415-26 DU	SP-00-082718	Dissolved	Water	3010A	549517

Prep Batch: 549767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Total/NA	Water	3010A	
460-163415-2	Dup-02-082718	Total/NA	Water	3010A	
460-163415-4	PMB-02-082718	Total/NA	Water	3010A	
460-163415-5	PAB-03-082718	Total/NA	Water	3010A	
460-163415-6	PAB-02-082718	Total/NA	Water	3010A	
460-163415-7	MRB-02-082718	Total/NA	Water	3010A	
460-163415-8	MRB-03-082718	Total/NA	Water	3010A	
460-163415-9	NOB-01-082718	Total/NA	Water	3010A	
460-163415-10	PAB-00-082718	Total/NA	Water	3010A	
MB 460-549767/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-549767/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-163433-M-2-D MS ^2	Matrix Spike	Total/NA	Water	3010A	
460-163433-M-2-D MS ^20	Matrix Spike	Total/NA	Water	3010A	
460-163433-M-2-C DU ^2	Duplicate	Total/NA	Water	3010A	
460-163433-M-2-C DU ^20	Duplicate	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 549768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-3	PMB-01A-082718	Total/NA	Water	3010A	
460-163415-11	PAB-01-082718	Total/NA	Water	3010A	
460-163415-12	SW-11-082718	Total/NA	Water	3010A	
460-163415-13	Dup-01-082718	Total/NA	Water	3010A	
460-163415-14	PAB-01A-082718	Total/NA	Water	3010A	
460-163415-15	PMP-POND-082718	Total/NA	Water	3010A	
460-163415-16	SR3-POND-082718	Total/NA	Water	3010A	
460-163415-17	SR3-Seep-01-082718	Total/NA	Water	3010A	
460-163415-18	SR3-Seep-02-082718	Total/NA	Water	3010A	
460-163415-19	SW-3-082718	Total/NA	Water	3010A	
460-163415-20	MRB-01-082718	Total/NA	Water	3010A	
460-163415-21	MRB-00-082718	Total/NA	Water	3010A	
460-163415-23	RC-03-082718	Total/NA	Water	3010A	
460-163415-24	SW-04-082718	Total/NA	Water	3010A	
460-163415-25	SW-17-082718	Total/NA	Water	3010A	
460-163415-27	SP-01-082718	Total/NA	Water	3010A	
460-163415-28	RC-02-082718	Total/NA	Water	3010A	
460-163415-29	RC-01-082718	Total/NA	Water	3010A	
460-163415-30	PAB-03A-082718	Total/NA	Water	3010A	
460-163415-31	PAB-04-082718	Total/NA	Water	3010A	
MB 460-549768/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-549768/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-163415-3 MS	PMB-01A-082718	Total/NA	Water	3010A	
460-163415-3 DU	PMB-01A-082718	Total/NA	Water	3010A	

Prep Batch: 549769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-26	SP-00-082718	Total/NA	Water	3010A	
460-163415-32	NOB-02-082718	Total/NA	Water	3010A	
460-163415-33	RM-01-082718	Total/NA	Water	3010A	
460-163415-34	PMB-02A-082718	Total/NA	Water	3010A	
MB 460-549769/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-549769/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-163415-26 MS	SP-00-082718	Total/NA	Water	3010A	
460-163415-26 DU	SP-00-082718	Total/NA	Water	3010A	

Analysis Batch: 549850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Total/NA	Water	6020B	549767
460-163415-2	Dup-02-082718	Total/NA	Water	6020B	549767
460-163415-4	PMB-02-082718	Total/NA	Water	6020B	549767
460-163415-5	PAB-03-082718	Total/NA	Water	6020B	549767
460-163415-6	PAB-02-082718	Total/NA	Water	6020B	549767
460-163415-7	MRB-02-082718	Total/NA	Water	6020B	549767
460-163415-8	MRB-03-082718	Total/NA	Water	6020B	549767
460-163415-9	NOB-01-082718	Total/NA	Water	6020B	549767
460-163415-10	PAB-00-082718	Total/NA	Water	6020B	549767
460-163415-26	SP-00-082718	Total/NA	Water	6020B	549769
460-163415-32	NOB-02-082718	Total/NA	Water	6020B	549769
460-163415-33	RM-01-082718	Total/NA	Water	6020B	549769
460-163415-34	PMB-02A-082718	Total/NA	Water	6020B	549769

Metals (Continued)

Analysis Batch: 549850 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-549767/1-A ^2	Method Blank	Total/NA	Water	6020B	549767
MB 460-549769/1-A ^2	Method Blank	Total/NA	Water	6020B	549769
LCS 460-549767/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	549767
LCS 460-549769/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	549769
460-163415-26 MS	SP-00-082718	Total/NA	Water	6020B	549769
460-163433-M-2-D MS ^2	Matrix Spike	Total/NA	Water	6020B	549767
460-163415-26 DU	SP-00-082718	Total/NA	Water	6020B	549769
460-163433-M-2-C DU ^2	Duplicate	Total/NA	Water	6020B	549767

Analysis Batch: 550229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-32	NOB-02-082718	Total/NA	Water	6020B	549769
460-163415-33	RM-01-082718	Total/NA	Water	6020B	549769
MB 460-549767/1-A ^2	Method Blank	Total/NA	Water	6020B	549767
MB 460-549769/1-A ^2	Method Blank	Total/NA	Water	6020B	549769
460-163433-M-2-D MS ^20	Matrix Spike	Total/NA	Water	6020B	549767
460-163433-M-2-C DU ^20	Duplicate	Total/NA	Water	6020B	549767

Analysis Batch: 550980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-549517/1-B	Method Blank	Dissolved	Water	6020B	549696
LCS 460-549696/2-A	Lab Control Sample	Total/NA	Water	6020B	549696

Analysis Batch: 551313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-21	MRB-00-082718	Dissolved	Water	6020B	549696
460-163415-23	RC-03-082718	Dissolved	Water	6020B	549696
460-163415-24	SW-04-082718	Dissolved	Water	6020B	549696
460-163415-25	SW-17-082718	Dissolved	Water	6020B	549696
460-163415-26	SP-00-082718	Dissolved	Water	6020B	549696
460-163415-27	SP-01-082718	Dissolved	Water	6020B	549696
460-163415-28	RC-02-082718	Dissolved	Water	6020B	549696
460-163415-29	RC-01-082718	Dissolved	Water	6020B	549696
460-163415-30	PAB-03A-082718	Dissolved	Water	6020B	549696
460-163415-31	PAB-04-082718	Dissolved	Water	6020B	549696
460-163415-32	NOB-02-082718	Dissolved	Water	6020B	549696
460-163415-33	RM-01-082718	Dissolved	Water	6020B	549696
460-163415-34	PMB-02A-082718	Dissolved	Water	6020B	549696
MB 460-549517/1-B	Method Blank	Dissolved	Water	6020B	549696
LCS 460-549696/2-A	Lab Control Sample	Total/NA	Water	6020B	549696
460-163415-26 MS	SP-00-082718	Dissolved	Water	6020B	549696
460-163415-26 DU	SP-00-082718	Dissolved	Water	6020B	549696

Analysis Batch: 551612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-3	PMB-01A-082718	Total/NA	Water	6020B	549768
460-163415-11	PAB-01-082718	Total/NA	Water	6020B	549768
460-163415-12	SW-11-082718	Total/NA	Water	6020B	549768
460-163415-13	Dup-01-082718	Total/NA	Water	6020B	549768
460-163415-14	PAB-01A-082718	Total/NA	Water	6020B	549768
460-163415-15	PMP-POND-082718	Total/NA	Water	6020B	549768

Metals (Continued)

Analysis Batch: 551612 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-16	SR3-POND-082718	Total/NA	Water	6020B	549768
460-163415-17	SR3-Seep-01-082718	Total/NA	Water	6020B	549768
460-163415-18	SR3-Seep-02-082718	Total/NA	Water	6020B	549768
460-163415-19	SW-3-082718	Total/NA	Water	6020B	549768
460-163415-20	MRB-01-082718	Total/NA	Water	6020B	549768
460-163415-21	MRB-00-082718	Total/NA	Water	6020B	549768
460-163415-23	RC-03-082718	Total/NA	Water	6020B	549768
460-163415-24	SW-04-082718	Total/NA	Water	6020B	549768
460-163415-25	SW-17-082718	Total/NA	Water	6020B	549768
460-163415-27	SP-01-082718	Total/NA	Water	6020B	549768
460-163415-28	RC-02-082718	Total/NA	Water	6020B	549768
460-163415-29	RC-01-082718	Total/NA	Water	6020B	549768
460-163415-30	PAB-03A-082718	Total/NA	Water	6020B	549768
460-163415-31	PAB-04-082718	Total/NA	Water	6020B	549768
460-163415-32	NOB-02-082718	Total/NA	Water	6020B	549769
460-163415-33	RM-01-082718	Total/NA	Water	6020B	549769
MB 460-549768/1-A ^2	Method Blank	Total/NA	Water	6020B	549768
LCS 460-549768/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	549768
460-163415-3 MS	PMB-01A-082718	Total/NA	Water	6020B	549768
460-163415-3 DU	PMB-01A-082718	Total/NA	Water	6020B	549768

Analysis Batch: 551988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-34	PMB-02A-082718	Total/NA	Water	6020B	549769

General Chemistry

Analysis Batch: 548413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Total/NA	Water	SM 2320B	
460-163415-2	Dup-02-082718	Total/NA	Water	SM 2320B	
460-163415-3	PMB-01A-082718	Total/NA	Water	SM 2320B	
460-163415-4	PMB-02-082718	Total/NA	Water	SM 2320B	
460-163415-5	PAB-03-082718	Total/NA	Water	SM 2320B	
460-163415-6	PAB-02-082718	Total/NA	Water	SM 2320B	
460-163415-7	MRB-02-082718	Total/NA	Water	SM 2320B	
460-163415-8	MRB-03-082718	Total/NA	Water	SM 2320B	
460-163415-9	NOB-01-082718	Total/NA	Water	SM 2320B	
460-163415-10	PAB-00-082718	Total/NA	Water	SM 2320B	
460-163415-11	PAB-01-082718	Total/NA	Water	SM 2320B	
460-163415-12	SW-11-082718	Total/NA	Water	SM 2320B	
460-163415-13	Dup-01-082718	Total/NA	Water	SM 2320B	
460-163415-14	PAB-01A-082718	Total/NA	Water	SM 2320B	
460-163415-15	PMP-POND-082718	Total/NA	Water	SM 2320B	
460-163415-16	SR3-POND-082718	Total/NA	Water	SM 2320B	
MB 460-548413/25	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-548413/26	Lab Control Sample	Total/NA	Water	SM 2320B	
460-163415-3 DU	PMB-01A-082718	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 548864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-17	SR3-Seep-01-082718	Total/NA	Water	SM 2320B	
460-163415-18	SR3-Seep-02-082718	Total/NA	Water	SM 2320B	
460-163415-19	SW-3-082718	Total/NA	Water	SM 2320B	
460-163415-20	MRB-01-082718	Total/NA	Water	SM 2320B	
460-163415-21	MRB-00-082718	Total/NA	Water	SM 2320B	
460-163415-23	RC-03-082718	Total/NA	Water	SM 2320B	
460-163415-24	SW-04-082718	Total/NA	Water	SM 2320B	
460-163415-25	SW-17-082718	Total/NA	Water	SM 2320B	
460-163415-26	SP-00-082718	Total/NA	Water	SM 2320B	
460-163415-27	SP-01-082718	Total/NA	Water	SM 2320B	
460-163415-28	RC-02-082718	Total/NA	Water	SM 2320B	
460-163415-29	RC-01-082718	Total/NA	Water	SM 2320B	
460-163415-30	PAB-03A-082718	Total/NA	Water	SM 2320B	
460-163415-31	PAB-04-082718	Total/NA	Water	SM 2320B	
460-163415-32	NOB-02-082718	Total/NA	Water	SM 2320B	
460-163415-33	RM-01-082718	Total/NA	Water	SM 2320B	
460-163415-34	PMB-02A-082718	Total/NA	Water	SM 2320B	
MB 460-548864/2	Method Blank	Total/NA	Water	SM 2320B	
MB 460-548864/25	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-548864/26	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSSRM 460-548864/3	Lab Control Sample	Total/NA	Water	SM 2320B	
460-163415-26 DU	SP-00-082718	Total/NA	Water	SM 2320B	

Prep Batch: 548890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Total/NA	Water	9012B	
460-163415-2	Dup-02-082718	Total/NA	Water	9012B	
460-163415-4	PMB-02-082718	Total/NA	Water	9012B	
460-163415-5	PAB-03-082718	Total/NA	Water	9012B	
460-163415-6	PAB-02-082718	Total/NA	Water	9012B	
460-163415-7	MRB-02-082718	Total/NA	Water	9012B	
460-163415-8	MRB-03-082718	Total/NA	Water	9012B	
460-163415-9	NOB-01-082718	Total/NA	Water	9012B	
460-163415-10	PAB-00-082718	Total/NA	Water	9012B	
460-163415-11	PAB-01-082718	Total/NA	Water	9012B	
MB 460-548890/1-A	Method Blank	Total/NA	Water	9012B	
LCS 460-548890/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163366-F-4-B MS	Matrix Spike	Total/NA	Water	9012B	
460-163366-F-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	

Analysis Batch: 548949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-1	PMB-01-082718	Total/NA	Water	9012B	548890
460-163415-2	Dup-02-082718	Total/NA	Water	9012B	548890
460-163415-4	PMB-02-082718	Total/NA	Water	9012B	548890
460-163415-5	PAB-03-082718	Total/NA	Water	9012B	548890
460-163415-6	PAB-02-082718	Total/NA	Water	9012B	548890
460-163415-7	MRB-02-082718	Total/NA	Water	9012B	548890
460-163415-8	MRB-03-082718	Total/NA	Water	9012B	548890
460-163415-9	NOB-01-082718	Total/NA	Water	9012B	548890
460-163415-10	PAB-00-082718	Total/NA	Water	9012B	548890

General Chemistry (Continued)

Analysis Batch: 548949 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-11	PAB-01-082718	Total/NA	Water	9012B	548890
MB 460-548890/1-A	Method Blank	Total/NA	Water	9012B	548890
LCS 460-548890/2-A	Lab Control Sample	Total/NA	Water	9012B	548890
460-163366-F-4-B MS	Matrix Spike	Total/NA	Water	9012B	548890
460-163366-F-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	548890

Prep Batch: 549508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-3	PMB-01A-082718	Total/NA	Water	9012B	
460-163415-12	SW-11-082718	Total/NA	Water	9012B	
460-163415-13	Dup-01-082718	Total/NA	Water	9012B	
460-163415-14	PAB-01A-082718	Total/NA	Water	9012B	
460-163415-15	PMP-POND-082718	Total/NA	Water	9012B	
460-163415-16	SR3-POND-082718	Total/NA	Water	9012B	
460-163415-17	SR3-Seep-01-082718	Total/NA	Water	9012B	
460-163415-18	SR3-Seep-02-082718	Total/NA	Water	9012B	
460-163415-19	SW-3-082718	Total/NA	Water	9012B	
460-163415-20	MRB-01-082718	Total/NA	Water	9012B	
460-163415-21	MRB-00-082718	Total/NA	Water	9012B	
460-163415-23	RC-03-082718	Total/NA	Water	9012B	
460-163415-24	SW-04-082718	Total/NA	Water	9012B	
460-163415-25	SW-17-082718	Total/NA	Water	9012B	
460-163415-26	SP-00-082718	Total/NA	Water	9012B	
MB 460-549508/1-A	Method Blank	Total/NA	Water	9012B	
LCS 460-549508/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163415-3 MS	PMB-01A-082718	Total/NA	Water	9012B	
460-163415-3 MSD	PMB-01A-082718	Total/NA	Water	9012B	
460-163415-26 MS	SP-00-082718	Total/NA	Water	9012B	
460-163415-26 MSD	SP-00-082718	Total/NA	Water	9012B	

Analysis Batch: 549577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-3	PMB-01A-082718	Total/NA	Water	9012B	549508
460-163415-12	SW-11-082718	Total/NA	Water	9012B	549508
460-163415-13	Dup-01-082718	Total/NA	Water	9012B	549508
460-163415-14	PAB-01A-082718	Total/NA	Water	9012B	549508
460-163415-15	PMP-POND-082718	Total/NA	Water	9012B	549508
460-163415-16	SR3-POND-082718	Total/NA	Water	9012B	549508
460-163415-17	SR3-Seep-01-082718	Total/NA	Water	9012B	549508
460-163415-18	SR3-Seep-02-082718	Total/NA	Water	9012B	549508
460-163415-19	SW-3-082718	Total/NA	Water	9012B	549508
460-163415-20	MRB-01-082718	Total/NA	Water	9012B	549508
460-163415-21	MRB-00-082718	Total/NA	Water	9012B	549508
460-163415-23	RC-03-082718	Total/NA	Water	9012B	549508
460-163415-24	SW-04-082718	Total/NA	Water	9012B	549508
460-163415-25	SW-17-082718	Total/NA	Water	9012B	549508
460-163415-26	SP-00-082718	Total/NA	Water	9012B	549508
MB 460-549508/1-A	Method Blank	Total/NA	Water	9012B	549508
LCS 460-549508/2-A	Lab Control Sample	Total/NA	Water	9012B	549508
460-163415-3 MS	PMB-01A-082718	Total/NA	Water	9012B	549508
460-163415-3 MSD	PMB-01A-082718	Total/NA	Water	9012B	549508

General Chemistry (Continued)

Analysis Batch: 549577 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-26 MS	SP-00-082718	Total/NA	Water	9012B	549508
460-163415-26 MSD	SP-00-082718	Total/NA	Water	9012B	549508

Prep Batch: 550322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-27	SP-01-082718	Total/NA	Water	9012B	
460-163415-28	RC-02-082718	Total/NA	Water	9012B	
460-163415-29	RC-01-082718	Total/NA	Water	9012B	
460-163415-30	PAB-03A-082718	Total/NA	Water	9012B	
460-163415-31	PAB-04-082718	Total/NA	Water	9012B	
460-163415-32	NOB-02-082718	Total/NA	Water	9012B	
460-163415-33	RM-01-082718	Total/NA	Water	9012B	
460-163415-34	PMB-02A-082718	Total/NA	Water	9012B	
MB 460-550322/1-A	Method Blank	Total/NA	Water	9012B	
LCS 460-550322/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163415-27 MS	SP-01-082718	Total/NA	Water	9012B	
460-163415-27 MSD	SP-01-082718	Total/NA	Water	9012B	

Analysis Batch: 550403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163415-27	SP-01-082718	Total/NA	Water	9012B	550322
460-163415-28	RC-02-082718	Total/NA	Water	9012B	550322
460-163415-29	RC-01-082718	Total/NA	Water	9012B	550322
460-163415-30	PAB-03A-082718	Total/NA	Water	9012B	550322
460-163415-31	PAB-04-082718	Total/NA	Water	9012B	550322
460-163415-32	NOB-02-082718	Total/NA	Water	9012B	550322
460-163415-33	RM-01-082718	Total/NA	Water	9012B	550322
460-163415-34	PMB-02A-082718	Total/NA	Water	9012B	550322
MB 460-550322/1-A	Method Blank	Total/NA	Water	9012B	550322
LCS 460-550322/2-A	Lab Control Sample	Total/NA	Water	9012B	550322
460-163415-27 MS	SP-01-082718	Total/NA	Water	9012B	550322
460-163415-27 MSD	SP-01-082718	Total/NA	Water	9012B	550322

Client Sample ID: PMB-01-082718

Lab Sample ID: 460-163415-1

Date Collected: 08/27/18 10:45

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 11:16	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 12:24	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 00:01	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 17:50	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	20	548646	08/30/18 15:59	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 05:53	MDC	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 04:12	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 16:41	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 14:46	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:28	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 15:19	PHM	TAL EDI

Client Sample ID: Dup-02-082718

Lab Sample ID: 460-163415-2

Date Collected: 08/27/18 11:00

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548531	08/30/18 09:58	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 12:47	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 00:19	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 18:02	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	20	548646	08/30/18 16:13	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 05:59	MDC	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 04:23	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 16:43	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 14:51	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:29	RAK	TAL EDI

Client Sample ID: Dup-02-082718

Lab Sample ID: 460-163415-2

Date Collected: 08/27/18 11:00

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 15:27	PHM	TAL EDI

Client Sample ID: PMB-01A-082718

Lab Sample ID: 460-163415-3

Date Collected: 08/27/18 11:30

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548531	08/30/18 10:22	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 12:01	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/29/18 23:08	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 16:54	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	20	548646	08/30/18 15:06	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 05:45	MDC	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 20:41	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 16:24	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 14:34	RBS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:29	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 14:27	PHM	TAL EDI

Client Sample ID: PMB-02-082718

Lab Sample ID: 460-163415-4

Date Collected: 08/27/18 12:00

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548531	08/30/18 11:59	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 13:10	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 00:37	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 18:35	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	20	548646	08/30/18 16:52	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:09	MDC	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 04:26	PHP	TAL EDI

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 16:45	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 14:53	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:30	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 15:35	PHM	TAL EDI

Client Sample ID: PAB-03-082718

Lab Sample ID: 460-163415-5

Date Collected: 08/27/18 11:00

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548531	08/30/18 12:23	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 13:33	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 00:55	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 18:47	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:12	MDC	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 04:28	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 16:47	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 14:55	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:34	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 15:42	PHM	TAL EDI

Client Sample ID: PAB-02-082718

Lab Sample ID: 460-163415-6

Date Collected: 08/27/18 11:30

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548531	08/30/18 12:47	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 13:57	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 01:12	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 18:58	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:15	MDC	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI

Client Sample ID: PAB-02-082718

Lab Sample ID: 460-163415-6

Date Collected: 08/27/18 11:30

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020B		2	549850	09/06/18 04:31	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 16:48	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 14:57	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:35	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 15:50	PHM	TAL EDI

Client Sample ID: MRB-02-082718

Lab Sample ID: 460-163415-7

Date Collected: 08/27/18 13:50

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548531	08/30/18 13:11	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 14:20	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 01:30	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 19:09	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:17	MDC	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 04:34	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 16:50	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 14:58	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:36	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 15:58	PHM	TAL EDI

Client Sample ID: MRB-03-082718

Lab Sample ID: 460-163415-8

Date Collected: 08/27/18 14:15

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548531	08/30/18 13:35	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 14:43	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 01:48	SK	TAL EDI

Client Sample ID: MRB-03-082718

Lab Sample ID: 460-163415-8

Date Collected: 08/27/18 14:15

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	548204	08/29/18 19:20	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	5	548646	08/30/18 17:06	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:20	MDC	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 04:36	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 16:52	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 15:00	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:37	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 16:05	PHM	TAL EDI

Client Sample ID: NOB-01-082718

Lab Sample ID: 460-163415-9

Date Collected: 08/27/18 08:55

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548531	08/30/18 14:00	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 15:06	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 02:06	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 19:54	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:23	MDC	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 04:42	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 16:53	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 15:02	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:38	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 16:13	PHM	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: PAB-00-082718

Date Collected: 08/27/18 09:10
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549013	09/01/18 01:09	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 15:30	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 02:24	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 20:06	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:25	MDC	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 04:47	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 16:55	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 15:03	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:38	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 16:20	PHM	TAL EDI

Client Sample ID: PAB-01-082718

Date Collected: 08/27/18 08:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548531	08/30/18 14:48	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 15:53	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 02:42	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 20:17	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:28	MDC	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 20:52	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 16:57	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 15:05	RBS	TAL EDI
Total/NA	Prep	9012B			548890	08/31/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	548949	08/31/18 10:39	RAK	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 16:28	PHM	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: SW-11-082718

Date Collected: 08/27/18 08:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548531	08/30/18 15:12	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 16:16	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 02:59	SK	TAL EDI
Total/NA	Analysis	9056A		1	548646	08/30/18 17:18	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:33	MDC	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 21:02	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 17:02	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 15:07	RBS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:35	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 16:36	PHM	TAL EDI

Client Sample ID: Dup-01-082718

Date Collected: 08/27/18 12:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548531	08/30/18 15:37	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 16:39	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 03:17	SK	TAL EDI
Total/NA	Analysis	9056A		1	548646	08/30/18 17:31	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:44	MDC	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 21:05	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 17:04	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 15:12	RBS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:36	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 16:43	PHM	TAL EDI

Client Sample ID: PAB-01A-082718

Lab Sample ID: 460-163415-14

Date Collected: 08/27/18 09:30

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548531	08/30/18 16:00	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 17:02	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 03:35	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 21:47	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:47	MDC	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 21:08	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 17:05	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 15:14	RBS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:37	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 16:51	PHM	TAL EDI

Client Sample ID: PMP-POND-082718

Lab Sample ID: 460-163415-15

Date Collected: 08/27/18 09:30

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548531	08/30/18 16:25	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 17:25	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 03:53	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 21:59	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:49	MDC	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 21:11	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 17:07	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 15:15	RBS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:38	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 17:00	PHM	TAL EDI

Client Sample ID: SR3-POND-082718

Lab Sample ID: 460-163415-16

Date Collected: 08/27/18 09:45

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549013	09/01/18 01:34	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 17:49	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 04:11	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 22:10	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:52	MDC	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 21:13	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 17:09	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 15:17	RBS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:39	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548413	08/29/18 17:08	PHM	TAL EDI

Client Sample ID: SR3-Seep-01-082718

Lab Sample ID: 460-163415-17

Date Collected: 08/27/18 10:00

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549013	09/01/18 01:58	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 18:12	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 04:29	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 22:44	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:55	MDC	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 21:19	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 17:11	RBS	TAL EDI
Total/NA	Prep	7470A			548961	08/31/18 13:10	RBS	TAL EDI
Total/NA	Analysis	7470A		1	549004	08/31/18 15:19	RBS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:39	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 16:32	PHM	TAL EDI

Client Sample ID: SR3-Seep-02-082718

Lab Sample ID: 460-163415-18

Date Collected: 08/27/18 10:15

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549013	09/01/18 02:23	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	549340	09/02/18 18:35	SZD	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 04:46	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 22:55	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 06:57	MDC	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 21:38	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 17:12	RBS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:15	TJS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:40	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 16:39	PHM	TAL EDI

Client Sample ID: SW-3-082718

Lab Sample ID: 460-163415-19

Date Collected: 08/27/18 14:45

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 11:40	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	550072	09/06/18 18:31	EMM	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 05:04	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 23:07	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	20	548646	08/30/18 17:45	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 07:03	MDC	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 21:46	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 17:14	RBS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:17	TJS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:41	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 16:46	PHM	TAL EDI

Client Sample ID: MRB-01-082718

Lab Sample ID: 460-163415-20

Date Collected: 08/27/18 13:25

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 12:04	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	550785	09/10/18 00:55	XXC	TAL EDI
Total/NA	Prep	3510C			548292	08/29/18 09:05	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 05:22	SK	TAL EDI
Total/NA	Analysis	9056A		1	548204	08/29/18 23:18	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549516	09/04/18 08:56	MDC	TAL EDI
Dissolved	Prep	3010A			549692	09/05/18 01:39	VAD	TAL EDI
Dissolved	Analysis	6020B		2	549568	09/05/18 07:08	MDC	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 21:48	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			548960	08/31/18 13:06	RBS	TAL EDI
Dissolved	Prep	7470A			548966	08/31/18 13:24	RBS	TAL EDI
Dissolved	Analysis	7470A		1	549004	08/31/18 17:16	RBS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:19	TJS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:46	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 16:54	PHM	TAL EDI

Client Sample ID: MRB-00-082718

Lab Sample ID: 460-163415-21

Date Collected: 08/27/18 13:00

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 08:51	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	550072	09/06/18 19:17	EMM	TAL EDI
Total/NA	Prep	3510C			548293	08/29/18 09:12	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 07:09	SK	TAL EDI
Total/NA	Analysis	9056A		1	548207	08/30/18 15:40	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			549517	09/04/18 08:59	MDC	TAL EDI
Dissolved	Prep	3010A			549696	09/05/18 02:47	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551313	09/11/18 15:33	PHP	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 21:51	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			549449	09/04/18 04:11	TJS	TAL EDI
Dissolved	Prep	7470A			549452	09/04/18 05:20	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549548	09/04/18 10:14	TJS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:20	TJS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:46	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 17:01	PHM	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: TB-01-082718

Date Collected: 08/27/18 00:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 08:27	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	550072	09/06/18 19:41	EMM	TAL EDI

Client Sample ID: RC-03-082718

Date Collected: 08/27/18 15:30
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-23

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 12:28	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	550072	09/06/18 20:04	EMM	TAL EDI
Total/NA	Prep	3510C			548293	08/29/18 09:12	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 07:27	SK	TAL EDI
Total/NA	Analysis	9056A		1	548207	08/30/18 15:51	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	10	549036	08/31/18 21:56	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549517	09/04/18 08:59	MDC	TAL EDI
Dissolved	Prep	3010A			549696	09/05/18 02:47	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551313	09/11/18 15:38	PHP	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 21:54	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			549449	09/04/18 04:11	TJS	TAL EDI
Dissolved	Prep	7470A			549452	09/04/18 05:20	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549548	09/04/18 10:16	TJS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:26	TJS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:47	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 17:09	PHM	TAL EDI

Client Sample ID: SW-04-082718

Date Collected: 08/27/18 15:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 12:53	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	550785	09/09/18 23:22	XXC	TAL EDI
Total/NA	Prep	3510C			548293	08/29/18 09:12	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 07:45	SK	TAL EDI
Total/NA	Analysis	9056A		1	548207	08/30/18 16:36	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	20	549036	08/31/18 22:10	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549517	09/04/18 08:59	MDC	TAL EDI
Dissolved	Prep	3010A			549696	09/05/18 02:47	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551313	09/11/18 15:03	PHP	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: SW-04-082718

Date Collected: 08/27/18 15:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 21:56	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			549449	09/04/18 04:11	TJS	TAL EDI
Dissolved	Prep	7470A			549452	09/04/18 05:20	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549548	09/04/18 10:17	TJS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:27	TJS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:48	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 17:17	PHM	TAL EDI

Client Sample ID: SW-17-082718

Date Collected: 08/27/18 16:00
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549013	09/01/18 00:21	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	550785	09/09/18 23:45	XXC	TAL EDI
Total/NA	Prep	3510C			548293	08/29/18 09:12	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 08:02	SK	TAL EDI
Total/NA	Analysis	9056A		1	548207	08/30/18 16:59	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	20	549036	08/31/18 22:49	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549517	09/04/18 08:59	MDC	TAL EDI
Dissolved	Prep	3010A			549696	09/05/18 02:47	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551313	09/11/18 18:54	PHP	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 22:02	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			549449	09/04/18 04:11	TJS	TAL EDI
Dissolved	Prep	7470A			549452	09/04/18 05:20	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549548	09/04/18 10:19	TJS	TAL EDI
Total/NA	Prep	7470A			549464	09/04/18 05:55	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 10:57	TJS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:49	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 17:25	PHM	TAL EDI

Client Sample ID: SP-00-082718

Date Collected: 08/27/18 14:20
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-26

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 09:16	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	550785	09/09/18 22:59	XXC	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: SP-00-082718

Date Collected: 08/27/18 14:20
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-26

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			548293	08/29/18 09:12	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 06:15	SK	TAL EDI
Total/NA	Analysis	9056A		1	548207	08/30/18 14:55	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	10	549036	08/31/18 21:02	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549517	09/04/18 08:59	MDC	TAL EDI
Dissolved	Prep	3010A			549696	09/05/18 02:47	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551313	09/11/18 15:27	PHP	TAL EDI
Total/NA	Prep	3010A			549769	09/05/18 09:00	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/05/18 19:10	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			549449	09/04/18 04:11	TJS	TAL EDI
Dissolved	Prep	7470A			549452	09/04/18 05:20	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549548	09/04/18 09:58	TJS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:08	TJS	TAL EDI
Total/NA	Prep	9012B			549508	09/04/18 08:27	IAA	TAL EDI
Total/NA	Analysis	9012B		1	549577	09/04/18 12:50	PHM	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 18:36	PHM	TAL EDI

Client Sample ID: SP-01-082718

Date Collected: 08/27/18 13:45
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-27

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 13:41	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	550785	09/10/18 00:08	XXC	TAL EDI
Total/NA	Prep	3510C			548293	08/29/18 09:12	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 08:20	SK	TAL EDI
Total/NA	Analysis	9056A		1	548207	08/30/18 17:10	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	20	549036	08/31/18 23:02	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549517	09/04/18 08:59	MDC	TAL EDI
Dissolved	Prep	3010A			549696	09/05/18 02:47	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551313	09/11/18 18:57	PHP	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 08:59	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 22:13	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			549449	09/04/18 04:11	TJS	TAL EDI
Dissolved	Prep	7470A			549452	09/04/18 05:20	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549548	09/04/18 10:21	TJS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:29	TJS	TAL EDI
Total/NA	Prep	9012B			550322	09/07/18 08:35	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550403	09/07/18 10:59	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 17:33	PHM	TAL EDI

Client Sample ID: RC-02-082718

Lab Sample ID: 460-163415-28

Date Collected: 08/27/18 13:25

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 14:05	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	550785	09/10/18 00:32	XXC	TAL EDI
Total/NA	Prep	3510C			548293	08/29/18 09:12	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 08:38	SK	TAL EDI
Total/NA	Analysis	9056A		1	548207	08/30/18 17:21	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	20	549036	08/31/18 23:16	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549517	09/04/18 08:59	MDC	TAL EDI
Dissolved	Prep	3010A			549696	09/05/18 02:47	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551313	09/11/18 19:00	PHP	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 09:25	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 22:15	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			549449	09/04/18 04:11	TJS	TAL EDI
Dissolved	Prep	7470A			549452	09/04/18 05:20	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549548	09/04/18 10:23	TJS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:31	TJS	TAL EDI
Total/NA	Prep	9012B			550322	09/07/18 08:35	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550403	09/07/18 11:02	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 17:42	PHM	TAL EDI

Client Sample ID: RC-01-082718

Lab Sample ID: 460-163415-29

Date Collected: 08/27/18 12:45

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 14:30	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	550072	09/06/18 20:27	EMM	TAL EDI
Total/NA	Prep	3510C			548293	08/29/18 09:12	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 08:56	SK	TAL EDI
Total/NA	Analysis	9056A		1	548207	08/30/18 17:32	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	10	549036	08/31/18 23:29	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549517	09/04/18 08:59	MDC	TAL EDI
Dissolved	Prep	3010A			549696	09/05/18 02:47	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551313	09/11/18 19:02	PHP	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 09:25	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 22:18	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			549449	09/04/18 04:11	TJS	TAL EDI
Dissolved	Prep	7470A			549452	09/04/18 05:20	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549548	09/04/18 10:24	TJS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:32	TJS	TAL EDI
Total/NA	Prep	9012B			550322	09/07/18 08:35	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550403	09/07/18 11:06	HTV	TAL EDI

Client Sample ID: RC-01-082718

Lab Sample ID: 460-163415-29

Date Collected: 08/27/18 12:45

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 17:49	PHM	TAL EDI

Client Sample ID: PAB-03A-082718

Lab Sample ID: 460-163415-30

Date Collected: 08/27/18 15:20

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 14:54	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	550072	09/06/18 20:50	EMM	TAL EDI
Total/NA	Prep	3510C			548293	08/29/18 09:12	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 09:14	SK	TAL EDI
Total/NA	Analysis	9056A		1	548207	08/30/18 17:44	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			549517	09/04/18 08:59	MDC	TAL EDI
Dissolved	Prep	3010A			549696	09/05/18 02:47	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551313	09/11/18 19:05	PHP	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 09:25	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 22:23	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			549449	09/04/18 04:11	TJS	TAL EDI
Dissolved	Prep	7470A			549452	09/04/18 05:20	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549548	09/04/18 10:29	TJS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:34	TJS	TAL EDI
Total/NA	Prep	9012B			550322	09/07/18 08:35	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550403	09/07/18 11:07	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 17:57	PHM	TAL EDI

Client Sample ID: PAB-04-082718

Lab Sample ID: 460-163415-31

Date Collected: 08/27/18 14:50

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549013	09/01/18 00:45	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	550072	09/06/18 21:13	EMM	TAL EDI
Total/NA	Prep	3510C			548293	08/29/18 09:12	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548453	08/30/18 09:32	SK	TAL EDI
Total/NA	Analysis	9056A		1	548207	08/30/18 17:55	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			549517	09/04/18 08:59	MDC	TAL EDI
Dissolved	Prep	3010A			549696	09/05/18 02:47	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551313	09/11/18 19:08	PHP	TAL EDI
Total/NA	Prep	3010A			549768	09/05/18 09:25	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 22:29	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			549449	09/04/18 04:11	TJS	TAL EDI
Dissolved	Prep	7470A			549452	09/04/18 05:20	TJS	TAL EDI

Client Sample ID: PAB-04-082718

Lab Sample ID: 460-163415-31

Date Collected: 08/27/18 14:50

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	549548	09/04/18 10:31	TJS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:36	TJS	TAL EDI
Total/NA	Prep	9012B			550322	09/07/18 08:35	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550403	09/07/18 11:08	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 18:05	PHM	TAL EDI

Client Sample ID: NOB-02-082718

Lab Sample ID: 460-163415-32

Date Collected: 08/27/18 15:05

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 15:43	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	550072	09/06/18 21:37	EMM	TAL EDI
Total/NA	Prep	3510C			548293	08/29/18 09:12	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548593	08/30/18 10:42	SK	TAL EDI
Total/NA	Analysis	9056A		1	548207	08/30/18 18:06	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			549517	09/04/18 08:59	MDC	TAL EDI
Dissolved	Prep	3010A			549696	09/05/18 02:47	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551313	09/11/18 19:10	PHP	TAL EDI
Total/NA	Prep	3010A			549769	09/05/18 09:42	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/05/18 20:17	PHP	TAL EDI
Total/NA	Prep	3010A			549769	09/05/18 09:42	QZY	TAL EDI
Total/NA	Analysis	6020B		2	550229	09/06/18 19:38	PHP	TAL EDI
Total/NA	Prep	3010A			549769	09/05/18 09:42	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/13/18 05:08	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			549449	09/04/18 04:11	TJS	TAL EDI
Dissolved	Prep	7470A			549452	09/04/18 05:20	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549548	09/04/18 10:33	TJS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:37	TJS	TAL EDI
Total/NA	Prep	9012B			550322	09/07/18 08:35	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550403	09/07/18 11:09	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 18:13	PHM	TAL EDI

Client Sample ID: RM-01-082718

Lab Sample ID: 460-163415-33

Date Collected: 08/27/18 13:00

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	548838	08/31/18 16:07	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	550072	09/06/18 22:00	EMM	TAL EDI
Total/NA	Prep	3510C			548293	08/29/18 09:12	KMH	TAL EDI

Client Sample ID: RM-01-082718

Lab Sample ID: 460-163415-33

Date Collected: 08/27/18 13:00

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D SIM ID		1	548593	08/30/18 11:00	SK	TAL EDI
Total/NA	Analysis	9056A		1	548207	08/30/18 19:14	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	10	549036	09/01/18 00:09	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549517	09/04/18 08:59	MDC	TAL EDI
Dissolved	Prep	3010A			549696	09/05/18 02:47	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551313	09/11/18 19:13	PHP	TAL EDI
Total/NA	Prep	3010A			549769	09/05/18 09:42	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/05/18 20:20	PHP	TAL EDI
Total/NA	Prep	3010A			549769	09/05/18 09:42	QZY	TAL EDI
Total/NA	Analysis	6020B		2	550229	09/06/18 19:40	PHP	TAL EDI
Total/NA	Prep	3010A			549769	09/05/18 09:42	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/13/18 05:11	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			549449	09/04/18 04:11	TJS	TAL EDI
Dissolved	Prep	7470A			549452	09/04/18 05:20	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549548	09/04/18 10:35	TJS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549548	09/04/18 08:39	TJS	TAL EDI
Total/NA	Prep	9012B			550322	09/07/18 08:35	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550403	09/07/18 11:10	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 18:52	PHM	TAL EDI

Client Sample ID: PMB-02A-082718

Lab Sample ID: 460-163415-34

Date Collected: 08/27/18 12:05

Matrix: Water

Date Received: 08/28/18 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549013	09/01/18 02:47	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	550072	09/06/18 22:23	EMM	TAL EDI
Total/NA	Prep	3510C			548293	08/29/18 09:12	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548593	08/30/18 11:18	SK	TAL EDI
Total/NA	Analysis	9056A		1	548207	08/30/18 19:26	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	25	549036	09/01/18 00:22	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549517	09/04/18 08:59	MDC	TAL EDI
Dissolved	Prep	3010A			549696	09/05/18 02:47	VAD	TAL EDI
Dissolved	Analysis	6020B		2	551313	09/11/18 19:29	PHP	TAL EDI
Total/NA	Prep	3010A			549769	09/05/18 09:42	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/05/18 20:22	PHP	TAL EDI
Total/NA	Prep	3010A			549769	09/05/18 09:42	QZY	TAL EDI
Total/NA	Analysis	6020B		2	551988	09/13/18 14:45	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			549449	09/04/18 04:11	TJS	TAL EDI
Dissolved	Prep	7470A			549452	09/04/18 05:20	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549548	09/04/18 10:36	TJS	TAL EDI
Total/NA	Prep	7470A			549450	09/04/18 04:23	TJS	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Client Sample ID: PMB-02A-082718
Date Collected: 08/27/18 12:05
Date Received: 08/28/18 15:05

Lab Sample ID: 460-163415-34
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7470A		1	549548	09/04/18 08:41	TJS	TAL EDI
Total/NA	Prep	9012B			550322	09/07/18 08:35	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550403	09/07/18 11:11	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548864	08/30/18 19:00	PHM	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Cornerstone Environmental Group, LLC
TestAmerica Job ID: 460-163415-1
Project/Site: FORD Ringwood Mines E203361

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	12028	06-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	Ethylene Dibromide
9056A		Water	Chloride
9056A		Water	Sulfate

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL EDI
9056A	Anions, Ion Chromatography	SW846	TAL EDI
6020B	Metals (ICP/MS)	SW846	TAL EDI
7470A	Mercury (CVAA)	SW846	TAL EDI
9012B	Cyanide, Total andor Amenable	SW846	TAL EDI
SM 2320B	Alkalinity	SM	TAL EDI
3010A	Preparation, Total Metals	SW846	TAL EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI
7470A	Preparation, Mercury	SW846	TAL EDI
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL EDI
FILTRATION	Sample Filtration	None	TAL EDI

Protocol References:

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163415-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-163415-1	PMB-01-082718	Water	08/27/18 10:45	08/28/18 15:05
460-163415-2	Dup-02-082718	Water	08/27/18 11:00	08/28/18 15:05
460-163415-3	PMB-01A-082718	Water	08/27/18 11:30	08/28/18 15:05
460-163415-4	PMB-02-082718	Water	08/27/18 12:00	08/28/18 15:05
460-163415-5	PAB-03-082718	Water	08/27/18 11:00	08/28/18 15:05
460-163415-6	PAB-02-082718	Water	08/27/18 11:30	08/28/18 15:05
460-163415-7	MRB-02-082718	Water	08/27/18 13:50	08/28/18 15:05
460-163415-8	MRB-03-082718	Water	08/27/18 14:15	08/28/18 15:05
460-163415-9	NOB-01-082718	Water	08/27/18 08:55	08/28/18 15:05
460-163415-10	PAB-00-082718	Water	08/27/18 09:10	08/28/18 15:05
460-163415-11	PAB-01-082718	Water	08/27/18 08:30	08/28/18 15:05
460-163415-12	SW-11-082718	Water	08/27/18 08:45	08/28/18 15:05
460-163415-13	Dup-01-082718	Water	08/27/18 12:00	08/28/18 15:05
460-163415-14	PAB-01A-082718	Water	08/27/18 09:30	08/28/18 15:05
460-163415-15	PMP-POND-082718	Water	08/27/18 09:30	08/28/18 15:05
460-163415-16	SR3-POND-082718	Water	08/27/18 09:45	08/28/18 15:05
460-163415-17	SR3-Seep-01-082718	Water	08/27/18 10:00	08/28/18 15:05
460-163415-18	SR3-Seep-02-082718	Water	08/27/18 10:15	08/28/18 15:05
460-163415-19	SW-3-082718	Water	08/27/18 14:45	08/28/18 15:05
460-163415-20	MRB-01-082718	Water	08/27/18 13:25	08/28/18 15:05
460-163415-21	MRB-00-082718	Water	08/27/18 13:00	08/28/18 15:05
460-163415-22	TB-01-082718	Water	08/27/18 00:00	08/28/18 15:05
460-163415-23	RC-03-082718	Water	08/27/18 15:30	08/28/18 15:05
460-163415-24	SW-04-082718	Water	08/27/18 15:45	08/28/18 15:05
460-163415-25	SW-17-082718	Water	08/27/18 16:00	08/28/18 15:05
460-163415-26	SP-00-082718	Water	08/27/18 14:20	08/28/18 15:05
460-163415-27	SP-01-082718	Water	08/27/18 13:45	08/28/18 15:05
460-163415-28	RC-02-082718	Water	08/27/18 13:25	08/28/18 15:05
460-163415-29	RC-01-082718	Water	08/27/18 12:45	08/28/18 15:05
460-163415-30	PAB-03A-082718	Water	08/27/18 15:20	08/28/18 15:05
460-163415-31	PAB-04-082718	Water	08/27/18 14:50	08/28/18 15:05
460-163415-32	NOB-02-082718	Water	08/27/18 15:05	08/28/18 15:05
460-163415-33	RM-01-082718	Water	08/27/18 13:00	08/28/18 15:05
460-163415-34	PMB-02A-082718	Water	08/27/18 12:05	08/28/18 15:05

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9/14/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice)	Samplers Name (Printed)	Site/Project Identification
Tim Roeper	Dan Wheeler	Ringwood
Company: Cornerstone Environmental Group	P. O. # 180361-006	State (Location of site): NJ: ☒ NY: ☐ Other:
		Regulatory Program: DKQP: ☐
Address: 100 Crystal Run Rd, Suite 101	Analysis Turnaround Time: Standard ☒	
City: Middletown State: NY 10941	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: 845-695-0200 Fax:		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs TICs w/SIM	1,4 Dioxane by Isotope Dilution	Chloride	Sulfate	Alkalinity	TAL Metals	TAL Metals Dissolved	Total Cyanide				LAB USE ONLY Project No: / Job No: 163415 / Sample Numbers
PMB-01-082718	8/27/18	1045	SW	11	X	X	X	X	X	X	X	X				1
DUP-02-082718	8/27/18	1100	SW	11	X	X	X	X	X	X	X	X				2
PMB-01A-082718	8/27/18	1130	SW	11	X	X	X	X	X	X	X	X				3
PMB-01A-082718-MS	8/27/18	1130	SW	11	X	X	X	X	X	X	X	X				3
PMB-01A-082718-MSD	8/27/18	1130	SW	11	X	X	X	X	X	X	X	X				3
PMB-02-082718	8/27/18	1200	SW	11	X	X	X	X	X	X	X	X				4
PAB-03-082718	8/27/18	1100	SW	11	X	X	X	X	X	X	X	X				5
PAB-02-082718	8/27/18	1130	SW	11	X	X	X	X	X	X	X	X				6
MRB-02-082718	8/27/18	1350	SW	11	X	X	X	X	X	X	X	X				7
MRB-03-082718	8/27/18	1415	SW	11	X	X	X	X	X	X	X	X				8
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH				Soil:												
6 = Other _____, 7 = Other _____				Water:	2	1	1	1	1	4	1	5				

Special Instructions _____ Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	CORNERSTONE	8/28/15 1000	1) Tim YAP	TA EDISON
Relinquished by 2) Tim YAP	Company TA EDISON	Date / Time 8/28/15 1505	Received by 2)	Company TA Edi
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

460-163415 Chain of Custody

New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

NO CS

IR # 9 0.8°C 0.7°C 0.5°C 0.6°C 0.3°C 0.8°C 0.9°C 1.1°C 0.3°C

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9/14/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Tim Roeper	Samplers Name (Printed): Dan Wheeler	Site/Project Identification: Ringwood
Company: Cornerstone Environmental Group	P. O. #: 180361-006	State (Location of site): NJ: X NY: Other:
		Regulatory Program: DKQP:
Address: 100 Crystal Run Rd, Suite 101	Analysis Turnaround Time: Standard X	
City: Middletown State: NY 10941	Rush Charges Authorized For: 2 Week / 1 Week / Other	
Phone: 845-695-0200 Fax:		

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs + 15 TICs w/SIM	1,4 Dioxane by Isotope Dilution	Chloride	Sulfate	Alkalinity	TAL Metals	Dissolved TAL Metals	Total Cyanide				Sample Numbers
NOB-01-082718	8/27/18	0855	SW	11	X	X	X	X	X	X	X	X				9
PAB-00-082718	8/27/18	0910	SW	11	X	X	X	X	X	X	X	X				10
PAB-01-082718	8/27/18	0836	SW	11	X	X	X	X	X	X	X	X				11
SW-11-082718	8/27/18	0845	SW	11	X	X	X	X	X	X	X	X				12
Dup-01-082718	8/27/18	1200	SW	11	X	X	X	X	X	X	X	X				13
~~PAB-01A-082718~~	8/27/18	0930	SW	11	X	X	X	X	X	X	X	X				14
PMP POND-082818	8/27/18	0930	SW	11	X	X	X	X	X	X	X	X				15
SR3-POND-082718	8/27/18	0945	SW	11	X	X	X	X	X	X	X	X				16
SR3-Seep-01-082718	8/27/18	1000	SW	11	X	X	X	X	X	X	X	X				17
SR3-Seep-01-082718	8/27/18	1015	SW	11	X	X	X	X	X	X	X	X				18
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:																
6 = Other _____, 7 = Other _____ — Water:					2	1	1	1	1	4	1	5				

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 163415

Special Instructions

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1) CE NEC	Cornerstone	8/28/18 0800	1) Tim Yap	TA EDISON
2) Tim Yap	TA EDISON	8/28/18 1505	2) Kelly J	TAEdi
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

IR # 9

0.8°C 0.7°C 0.5°C 0.6°C 0.3°C
0.8°C 0.9°C 1.1°C 0.3°C

NO CS

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9/14/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Tim Roeper	Samplers Name (Printed): Dan Wheeler	Site/Project Identification: Ringwood
Company: Cornerstone Environmental Group	P. O. #: 180361-006	State (Location of site): NJ: X NY: Other:
		Regulatory Program: DKQP:
Address: 100 Crystal Run Rd, Suite 101	Analysis Turnaround Time: Standard X	
City: Middletown State: NY 10941	Rush Charges Authorized For: 2 Week / 1 Week / Other	
Phone: 845-695-0200 Fax:		

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs + TICs w/ SIM	1,4 Dioxane by Isotope Dilution	Chloride	Sulfate	Alkalinity	TAL Metals	Dissolved TAL metals	Total Cyanide				LAB USE ONLY Project No: / Job No: 163415 / Sample Numbers
SW-3-082718	8/27/18	1445	SW	11	X	X	X	X	X	X	X	X				19
MRB-01-082718	8/27/18	1325	SW	11	X	X	X	X	X	X	X	X				20
MRB-00-082718	8/27/18	1300	SW	11	X	X	X	X	X	X	X	X				21
TB-01-082718	8/27/18	—	BW	3	X											22
RC-03-082718	8/27/18	15:30	SW	11	X	X	X	X	X	X	X	X				23
SW-04-082718	8/27/18	15:45	SW	11	X	X	X	X	X	X	X	X				24
SW-17-082718	8/27/18	1600	SW	11	X	X	X	X	X	X	X	X				25
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:																
6 = Other _____, 7 = Other _____ — Water:					2	1	1	1	1	4	1	5				

Special Instructions _____ Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	CORNERSTONE	8/28/18 0810	1) Tim Yap	TA EDISON
Relinquished by 2) Tim Yap	Company TA EDISON	Date / Time 8/28/18 1505	Received by 2)	Company TA Edi
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

IR # 9

0.8°C 0.7°C 0.5°C 0.6°C 0.3°C
0.8°C 0.9°C 1.1°C 0.3°C

NO CS

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Edison, New Jersey 08817
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9/14/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Tim Roeper	Samplers Name (Printed): Dan Wheeler	Site/Project Identification: Ringwood
Company: Cornerstone Environmental Group	P. O. #: 180361-006	State (Location of site): NJ: ☒ NY: ☐ Other:
		Regulatory Program: DKQP: ☐
Address: 100 Crystal Run Rd, Suite 101	Analysis Turnaround Time: Standard ☒	
City: Middletown State: NY 10941	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: 845-695-0200 Fax:		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 163415

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs + TICs w/SIM	1,4 Dioxane by Isotope Dilution	Chloride	Sulfate	Alkalinity	TAL metals	Dissolved TAL Metals	Total Cyanide				Sample Numbers
SP-00-082718	8/27/18	1420	SW	11	X	X	X	X	X	X	X	X				26
SP-00-082718-MS	8/27/18	1420	SW	11												26
SP-00-082718-MSD	8/27/18	1420	SW	11												26
SP-01-082718	8/27/18	1345	SW	11												27
RC-02-082718	8/27/18	1325	SW	11												28
RC-01-082718	8/27/18	1245	SW	11												29
PAB-03A-082718	8/27/18	1520	SW	11												30
PAB-04-082718	8/27/18	1450	SW	11												31
NOB-02-082718	8/27/18	1505	SW	11												32
RM-01-082718	8/27/18	1300	SW	11									VLP 8/28/18			33
																34
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:																
6 = Other _____, 7 = Other _____ — Water:					2	1	1	1	1	4	1	5				

Special Instructions _____ Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	Cornerstone	8/28/18 08:00	1) Tim Yap	TA Edison
Relinquished by 2) Tim Yap	Company TA Edison	Date / Time 8/28/18 1505	Received by 2) Kelly J.	Company TAEdi
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

NOCS

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

IR # 9 0.6°C 0.7°C 0.5°C 0.6°C 0.3°C
0.8°C 0.9°C 1.1°C 0.3°C

TestAmerica Edison
Receipt Temperature and pH Log

Page ____ of ____

Job Number: 163415

Number of Coolers: 9 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	0.8 °C	0.8 °C	Cooler #4:	0.6 °C	0.6 °C	Cooler #7:	0.9 °C	0.9 °C
Cooler #2:	0.7 °C	0.7 °C	Cooler #5:	0.3 °C	0.3 °C	Cooler #8:	1.1 °C	1.1 °C
Cooler #3:	0.5 °C	0.5 °C	Cooler #6:	0.8 °C	0.8 °C	Cooler #9:	0.3 °C	0.3 °C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1				<2								>12			
2				<2								>12			
3				<2								>12			
3DUP/MSD				<2								>12			
3MS				<2								>12			
4				<2								>12			
5				<2								>12			
6				<2								>12			
7				<2								>12			
8				<2								>12			
9				<2								>12			
10				<2								>12			
11				<2								>12			

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: TY **Date:** 8/28/18

EDS-WI-038, Rev 4, 06/09/2014

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 163415

Number of Coolers: 9 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	°C	°C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
12				<2								>12			
13				<2								>12			
14				<2								>12			
15				<2								>12			
16				<2								>12			
17				<2								>12			
18				<2								>12			
19				<2								>12			
20				<2								>12			
21				<2								>12			
23				<2								>12			
24				<2								>12			
25				<2								>12			

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 8/28/18

TestAmerica Edison
Receipt Temperature and pH Log

Page ____ of ____

Job Number: 163415

Number of Coolers: 9 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	°C	°C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
26				<2								>12			
26DUP/MSD				<2								>12			
26MS				<2								>12			
27				<2								>12			
28				<2								>12			
29				<2								>12			
30				<2								>12			
31				<2								>12			
32				<2								>12			
33				<2								>12			
34				<2								>12			

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ Date: 8/28/18

9/14/2018

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 460-163415-1

Login Number: 163415
List Number: 1
Creator: Rivera, Kenneth

List Source: TestAmerica Edison

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-163526-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Dr. Tim Roeper

Authorized for release by:
9/13/2018 5:12:58 PM

Marie Meidhof, Senior Project Manager
(732)549-3900
marie.meidhof@testamericainc.com

LINKS

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

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-163526-1

Laboratory: TestAmerica Edison

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 460-163526-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 8/29/2018 2:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.9º C, 1.0º C and 1.2º C.

Receipt Exceptions

One container for the following sample was received empty: RW12 (130-140)-082918 (460-163526-8)/container "E" for Chloride/Sulfate. The laboratory can utilize one of the 250 ml glass jars provided for this sample analysis; there is sufficient volume to run all required tests for this sample.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples RW2 (279-289)-082818 (460-163526-1), RW2 (252-262)-082818 (460-163526-2), RW10A (51-61)-082818 (460-163526-3), RW10A (75-85)-082818 (460-163526-4), RW10 (120-130)-082818 (460-163526-5), RW10 (185-195)-082818 (460-163526-6), RW12 (55-65)-082918 (460-163526-7), RW12 (130-140)-082918 (460-163526-8) and TB-04-082918 (460-163526-9) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C DKQP. The samples were analyzed on 09/01/2018 and 09/03/2018.

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch analytical batch 460-549428 recovered outside control limits for the following analyte: Trichlorofluoromethane.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) DKQP

Job ID: 460-163526-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Samples RW2 (279-289)-082818 (460-163526-1), RW2 (252-262)-082818 (460-163526-2), RW10A (51-61)-082818 (460-163526-3), RW10A (75-85)-082818 (460-163526-4), RW10 (120-130)-082818 (460-163526-5), RW10 (185-195)-082818 (460-163526-6), RW12 (55-65)-082918 (460-163526-7) and RW12 (130-140)-082918 (460-163526-8) were analyzed for Semivolatile organic compounds (GC/MS) DKQP in accordance with EPA SW-846 Method 8270D DKQP. The samples were prepared on 08/31/2018 and analyzed on 09/01/2018.

The continuing calibration verification (CCV) associated with batch 460-549086 recovered above the upper control limit for 2,4-Dinitrophenol, 2-Nitrophenol, 3,3'-Dichlorobenzidine, 4,6-Dinitro-2-methylphenol, Bis(2-ethylhexyl) phthalate, Butyl benzyl phthalate and Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The LCS and LCSD associated with preparation batch 460-548982 and analytical batch 460-549086 was outside DKQP recovery criteria but within laboratory generated limits for the following analytes: 2-Chlorophenol, 2-Methylphenol and Hexachlorobutadiene. 2-Chlorophenol, 2-Methylphenol and Hexachlorobutadiene failed the recovery criteria low for LCS 460-548982/2-A. 2-Methylphenol failed the recovery criteria low for LCSD 460-548982/3-A. The data has been reported.

The LCS and LCSD associated with preparation batch 460-548982 and analytical batch 460-549086 was outside DKQP recovery criteria (low) but with laboratory generated limits for the following analyte: Caprolactam. The data has been reported.

The RPD of the LCS and LCSD for batch preparation batch 460-548982 and analytical batch 460-549086 recovered outside control limits for the following analytes: 4-Nitrophenol, Hexachlorobutadiene and Phenol.

The LCS associated with preparation batch 460-548983 and analytical batch 460-549105 was outside DKQP recovery criteria (low) but within laboratory generated limits for the following analytes: 2,2'-oxybis[1-chloropropane], 2-Chlorophenol and 2-Methylphenol. The data has been reported.

Several analytes failed the recovery criteria low for the matrix spike (MS) and matrix spike duplicate (MSD) of sample 460-163528-1 in batch 460-549105.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM)

Samples RW2 (279-289)-082818 (460-163526-1), RW2 (252-262)-082818 (460-163526-2), RW10A (51-61)-082818 (460-163526-3), RW10A (75-85)-082818 (460-163526-4), RW10 (120-130)-082818 (460-163526-5), RW10 (185-195)-082818 (460-163526-6), RW12 (55-65)-082918 (460-163526-7) and RW12 (130-140)-082918 (460-163526-8) were analyzed for semivolatile organic compounds - Selected Ion Mode (SIM) in accordance with EPA Method 8270C SIM DKQP. The samples were prepared on 08/31/2018 and analyzed on 09/02/2018.

The CCV associated with batch 460-549291 recovered above the upper control limit for Hexachlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The CCV analyzed in batch 460-549509 was outside the method criteria for the following analytes: Bis(2-chloroethyl)ether and Dibenz(a,h)anthracene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The LCS and LCSD for preparation batch 460-548983 and analytical batch 460-549509 recovered outside control limits for the following analyte: Dibenz(a,h)anthracene. This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

The LCSD for preparation batch 460-548982 and analytical batch 460-549291 recovered outside control limits for the following analyte:

Job ID: 460-163526-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Hexachlorobenzene. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

The RPD of the LCS and LCSD for batch preparation batch 460-548982 and analytical batch 460-549291 recovered outside control limits for the following analyte: Pentachlorophenol.

The RPD of the LCS and LCSD for batch preparation batch 460-548983 and analytical batch 460-549509 recovered outside control limits for the following analyte: Pentachlorophenol.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

1,4 DIOXANE BY 8270D SIM, ISOTOPE DILUTION

Samples RW2 (279-289)-082818 (460-163526-1), RW2 (252-262)-082818 (460-163526-2), RW10A (51-61)-082818 (460-163526-3), RW10A (75-85)-082818 (460-163526-4), RW10 (120-130)-082818 (460-163526-5), RW10 (185-195)-082818 (460-163526-6), RW12 (55-65)-082918 (460-163526-7) and RW12 (130-140)-082918 (460-163526-8) were analyzed for 1,4 Dioxane by 8270D SIM, Isotope Dilution in accordance with EPA SW-846 Method 8270D SIM. The samples were prepared and analyzed on 08/31/2018.

No difficulties were encountered during the 1,4 Dioxane analysis.

All quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS) - SELECTED ION MODE (SIM) DKQP

Samples RW2 (279-289)-082818 (460-163526-1), RW2 (252-262)-082818 (460-163526-2), RW10A (51-61)-082818 (460-163526-3), RW10A (75-85)-082818 (460-163526-4), RW10 (120-130)-082818 (460-163526-5), RW10 (185-195)-082818 (460-163526-6), RW12 (55-65)-082918 (460-163526-7), RW12 (130-140)-082918 (460-163526-8) and TB-04-082918 (460-163526-9) were analyzed for volatile organic compounds (GC-MS) - Selected Ion Mode (SIM) DKQP in accordance with EPA SW-846 Method 8260C SIM DKQP. The samples were analyzed on 09/02/2018.

No difficulties were encountered during the VOA SIM DKQP analysis.

All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS) DKQP

Samples RW2 (279-289)-082818 (460-163526-1), RW2 (252-262)-082818 (460-163526-2), RW10A (51-61)-082818 (460-163526-3), RW10A (75-85)-082818 (460-163526-4), RW10 (120-130)-082818 (460-163526-5), RW10 (185-195)-082818 (460-163526-6), RW12 (55-65)-082918 (460-163526-7) and RW12 (130-140)-082918 (460-163526-8) were analyzed for polychlorinated biphenyls (PCBs) DKQP in accordance with EPA SW-846 Method 8082A DKQP. The samples were prepared on 08/31/2018 and analyzed on 09/01/2018.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICP/MS)

Samples RW2 (279-289)-082818 (460-163526-1), RW2 (252-262)-082818 (460-163526-2), RW10A (51-61)-082818 (460-163526-3), RW10A (75-85)-082818 (460-163526-4), RW10 (120-130)-082818 (460-163526-5), RW10 (185-195)-082818 (460-163526-6), RW12 (55-65)-082918 (460-163526-7) and RW12 (130-140)-082918 (460-163526-8) were analyzed for Dissolved Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared and analyzed on 09/10/2018.

Calcium, Manganese and Sodium failed the recovery criteria high for the MS of sample RW2 (279-289)-082818MS (460-163526-1) in batch 460-550980.

Job ID: 460-163526-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Refer to the QC report for details.

No other difficulties were encountered during the Dissolved Metals analysis.

All other quality control parameters were within the acceptance limits.

METALS (ICP/MS)
Samples RW2 (279-289)-082818 (460-163526-1), RW2 (252-262)-082818 (460-163526-2), RW10A (51-61)-082818 (460-163526-3), RW10A (75-85)-082818 (460-163526-4), RW10 (120-130)-082818 (460-163526-5), RW10 (185-195)-082818 (460-163526-6), RW12 (55-65)-082918 (460-163526-7) and RW12 (130-140)-082918 (460-163526-8) were analyzed for Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared on 09/05/2018 and analyzed on 09/06/2018.

Sodium failed the recovery criteria low for the MS of sample 460-163433-2 in batch 460-550229. Several analytes failed the recovery criteria high.

Refer to the QC report for details.

No other difficulties were encountered during the Metals DKQP analysis.

All other quality control parameters were within the acceptance limits.

MERCURY DKQP
Samples RW2 (279-289)-082818 (460-163526-1), RW2 (252-262)-082818 (460-163526-2), RW10A (51-61)-082818 (460-163526-3), RW10A (75-85)-082818 (460-163526-4), RW10 (120-130)-082818 (460-163526-5), RW10 (185-195)-082818 (460-163526-6), RW12 (55-65)-082918 (460-163526-7) and RW12 (130-140)-082918 (460-163526-8) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 09/05/2018.

No difficulties were encountered during the dissolved Hg analysis.

All quality control parameters were within the acceptance limits.

MERCURY DKQP
Samples RW2 (279-289)-082818 (460-163526-1), RW2 (252-262)-082818 (460-163526-2), RW10A (51-61)-082818 (460-163526-3), RW10A (75-85)-082818 (460-163526-4), RW10 (120-130)-082818 (460-163526-5), RW10 (185-195)-082818 (460-163526-6), RW12 (55-65)-082918 (460-163526-7) and RW12 (130-140)-082918 (460-163526-8) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 09/05/2018.

No difficulties were encountered during the Hg analysis.

All quality control parameters were within the acceptance limits.

ANIONS
Samples RW2 (279-289)-082818 (460-163526-1), RW2 (252-262)-082818 (460-163526-2), RW10A (51-61)-082818 (460-163526-3), RW10A (75-85)-082818 (460-163526-4), RW10 (120-130)-082818 (460-163526-5), RW10 (185-195)-082818 (460-163526-6), RW12 (55-65)-082918 (460-163526-7) and RW12 (130-140)-082918 (460-163526-8) were analyzed for anions in accordance with EPA SW-846 Method 9056. The samples were analyzed on 08/30/2018 and 08/31/2018.

Chloride, Chloride and Sulfate failed the recovery criteria high for the MS of sample RW10A (75-85)-082818 (460-163526-4) in batch 460-548942.

For the MSD of sample RW10A (75-85)-082818MSD (460-163526-4) in batch 460-548942, Sulfate failed the recovery criteria low. Chloride and Chloride failed the recovery criteria high. Also, Chloride and Sulfate exceeded the RPD limit.

Refer to the QC report for details.

Job ID: 460-163526-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Samples RW2 (279-289)-082818 (460-163526-1)[2X], RW2 (252-262)-082818 (460-163526-2)[100X], RW10A (51-61)-082818 (460-163526-3)[3X], RW10A (75-85)-082818 (460-163526-4)[3X], RW10 (120-130)-082818 (460-163526-5)[10X], RW10 (185-195) -082818 (460-163526-6)[8X] and RW12 (55-65)-082918 (460-163526-7)[19X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the anions analysis.

All other quality control parameters were within the acceptance limits.

ALKALINITY

Samples RW2 (279-289)-082818 (460-163526-1), RW2 (252-262)-082818 (460-163526-2), RW10A (51-61)-082818 (460-163526-3), RW10A (75-85)-082818 (460-163526-4), RW10 (120-130)-082818 (460-163526-5), RW10 (185-195)-082818 (460-163526-6), RW12 (55-65)-082918 (460-163526-7) and RW12 (130-140)-082918 (460-163526-8) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 08/31/2018.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

TOTAL CYANIDE

Samples RW2 (279-289)-082818 (460-163526-1), RW2 (252-262)-082818 (460-163526-2), RW10A (51-61)-082818 (460-163526-3), RW10A (75-85)-082818 (460-163526-4), RW10 (120-130)-082818 (460-163526-5), RW10 (185-195)-082818 (460-163526-6), RW12 (55-65)-082918 (460-163526-7) and RW12 (130-140)-082918 (460-163526-8) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B (DKQP). The samples were prepared and analyzed on 09/07/2018 and 09/10/2018.

Cyanide, Total failed the recovery criteria low for the MS of sample 460-163440-3 in batch 460-550403.

Cyanide, Total exceeded the RPD limit for the MSD of sample 460-163440-3 in batch 460-550403.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the cyanide analysis.

All other quality control parameters were within the acceptance limits.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Client Sample ID: RW2 (279-289)-082818 — Lab Sample ID: 460-163526-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3-Dichlorobenzene	0.51	J	1.0	0.34	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	0.98	J	1.0	0.76	ug/L	1		8260C	Total/NA
Acetone	5.5		5.0	5.0	ug/L	1		8260C	Total/NA
Chlorobenzene	8.6		1.0	0.38	ug/L	1		8260C	Total/NA
Isopropylbenzene	0.35	J	1.0	0.34	ug/L	1		8260C	Total/NA
Toluene	0.44	J	1.0	0.38	ug/L	1		8260C	Total/NA
1,4-Dioxane	8.1		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Bis(2-chloroethyl)ether	0.027	J	0.030	0.026	ug/L	1		8270D SIM	Total/NA
Phenol	2.6	J *	10	0.29	ug/L	1		8270D	Total/NA
Chloride - DL	4.91	D	0.24	0.16	mg/L	2		9056A	Total/NA
Silver	4.5		2.0	1.4	ug/L	2		6020B	Total/NA
Arsenic	7.1		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	217		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	13.8		4.0	1.3	ug/L	2		6020B	Total/NA
Chromium	2.2	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	2.5	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	5730		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	12.4		4.0	1.3	ug/L	2		6020B	Total/NA
Zinc	15.4	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	50.7		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	112000		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	50100		200	65.7	ug/L	2		6020B	Total/NA
Potassium	7830		200	64.9	ug/L	2		6020B	Total/NA
Calcium	133000		200	67.6	ug/L	2		6020B	Total/NA
Iron	27500		120	45.7	ug/L	2		6020B	Total/NA
Arsenic	1.2	J	2.0	0.77	ug/L	2		6020B	Dissolved
Barium	109		4.0	1.1	ug/L	2		6020B	Dissolved
Cobalt	11.9		4.0	1.3	ug/L	2		6020B	Dissolved
Manganese	5400		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	10.6		4.0	1.3	ug/L	2		6020B	Dissolved
Sodium	105000		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	49300		200	65.7	ug/L	2		6020B	Dissolved
Potassium	7610		200	64.9	ug/L	2		6020B	Dissolved
Calcium	128000		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	621		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	621		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW2 (252-262)-082818 — Lab Sample ID: 460-163526-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13		5.0	5.0	ug/L	1		8260C	Total/NA
Carbon disulfide	4.2		1.0	0.16	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.48	J	1.0	0.47	ug/L	1		8260C	Total/NA
Methylene Chloride	0.34	J	1.0	0.32	ug/L	1		8260C	Total/NA
Toluene	0.82	J	1.0	0.38	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.82		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Phenol	8.2	J *	10	0.29	ug/L	1		8270D	Total/NA
Chloride - DL	517	D	12.0	7.80	mg/L	100		9056A	Total/NA
Sulfate - DL	166	D	60.0	33.2	mg/L	100		9056A	Total/NA
Arsenic	4.4		2.0	0.77	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW2 (252-262)-082818 (Continued) — Lab Sample ID: 460-163526-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	54.1		4.0	1.1	ug/L	2		6020B	Total/NA
Nickel	5.7		4.0	1.3	ug/L	2		6020B	Total/NA
Selenium	2.3	J	10.0	0.69	ug/L	2		6020B	Total/NA
Vanadium	10.3		4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	46.1		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	306000		200	75.7	ug/L	2		6020B	Total/NA
Potassium	58500		200	64.9	ug/L	2		6020B	Total/NA
Calcium	108000		200	67.6	ug/L	2		6020B	Total/NA
Arsenic	5.1		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	53.9		4.0	1.1	ug/L	2		6020B	Dissolved
Nickel	4.8		4.0	1.3	ug/L	2		6020B	Dissolved
Selenium	3.5	J	10.0	0.69	ug/L	2		6020B	Dissolved
Vanadium	12.2		4.0	1.2	ug/L	2		6020B	Dissolved
Aluminum	41.7		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	287000		200	75.7	ug/L	2		6020B	Dissolved
Potassium	57300		200	64.9	ug/L	2		6020B	Dissolved
Calcium	107000		200	67.6	ug/L	2		6020B	Dissolved
Alkalinity	80.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW10A (51-61)-082818 — Lab Sample ID: 460-163526-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.41	J	1.0	0.16	ug/L	1		8260C	Total/NA
Chloride	3.81		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate - DL	43.6	D	1.80	1.0	mg/L	3		9056A	Total/NA
Barium	9.1		4.0	1.1	ug/L	2		6020B	Total/NA
Cobalt	15.8		4.0	1.3	ug/L	2		6020B	Total/NA
Copper	2.5	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	4370		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	11.9		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.40	J	1.2	0.37	ug/L	2		6020B	Total/NA
Aluminum	16.5	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	13500		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	15700		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2650		200	64.9	ug/L	2		6020B	Total/NA
Calcium	57300		200	67.6	ug/L	2		6020B	Total/NA
Iron	339		120	45.7	ug/L	2		6020B	Total/NA
Barium	8.2		4.0	1.1	ug/L	2		6020B	Dissolved
Cobalt	15.5		4.0	1.3	ug/L	2		6020B	Dissolved
Manganese	4580		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	12.7		4.0	1.3	ug/L	2		6020B	Dissolved
Sodium	12400		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	13700		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2450		200	64.9	ug/L	2		6020B	Dissolved
Calcium	54200		200	67.6	ug/L	2		6020B	Dissolved
Cyanide, Total	0.0020	J	0.010	0.0020	mg/L	1		9012B	Total/NA
Bicarbonate Alkalinity as CaCO3	185		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	185		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW10A (75-85)-082818 — Lab Sample ID: 460-163526-4

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW10A (75-85)-082818 (Continued) — Lab Sample ID: 460-163526-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.48	J	1.0	0.32	ug/L	1		8260C	Total/NA
Benzo[a]anthracene	0.11		0.050	0.016	ug/L	1		8270D SIM	Total/NA
Benzo[a]pyrene	0.063		0.050	0.022	ug/L	1		8270D SIM	Total/NA
Benzo[b]fluoranthene	0.17		0.050	0.024	ug/L	1		8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.070		0.050	0.036	ug/L	1		8270D SIM	Total/NA
Chloride	3.23		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate - DL	36.9	D F2	1.80	1.0	mg/L	3		9056A	Total/NA
Barium	6.3		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.6	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	14.3		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.3	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	1.1	J	1.2	0.37	ug/L	2		6020B	Total/NA
Aluminum	67.3		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	5570		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	15300		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2040		200	64.9	ug/L	2		6020B	Total/NA
Calcium	48500		200	67.6	ug/L	2		6020B	Total/NA
Iron	105	J	120	45.7	ug/L	2		6020B	Total/NA
Barium	6.1		4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	5040		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	13800		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2010		200	64.9	ug/L	2		6020B	Dissolved
Calcium	48400		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	148		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	148		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW10 (120-130)-082818 — Lab Sample ID: 460-163526-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4.7	J	5.0	1.9	ug/L	1		8260C	Total/NA
Acetone	56		5.0	5.0	ug/L	1		8260C	Total/NA
Carbon disulfide	0.38	J	1.0	0.16	ug/L	1		8260C	Total/NA
Phenol	7.7	J *	10	0.29	ug/L	1		8270D	Total/NA
Chloride - DL	8.76	D	1.20	0.78	mg/L	10		9056A	Total/NA
Sulfate - DL	133	D	6.00	3.32	mg/L	10		9056A	Total/NA
Arsenic	8.1		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	13.6		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	4.2		4.0	1.9	ug/L	2		6020B	Total/NA
Nickel	9.1		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	1.2		1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	0.86	J	2.0	0.62	ug/L	2		6020B	Total/NA
Selenium	2.1	J	10.0	0.69	ug/L	2		6020B	Total/NA
Vanadium	5.1		4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	5.7	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	107		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	69500		200	75.7	ug/L	2		6020B	Total/NA
Potassium	19900		200	64.9	ug/L	2		6020B	Total/NA
Calcium	45600		200	67.6	ug/L	2		6020B	Total/NA
Iron	109	J	120	45.7	ug/L	2		6020B	Total/NA
Arsenic	7.5		2.0	0.77	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW10 (120-130)-082818 (Continued) — Lab Sample ID: 460-163526-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	13.1		4.0	1.1	ug/L	2		6020B	Dissolved
Nickel	8.3		4.0	1.3	ug/L	2		6020B	Dissolved
Selenium	3.2	J	10.0	0.69	ug/L	2		6020B	Dissolved
Vanadium	5.6		4.0	1.2	ug/L	2		6020B	Dissolved
Aluminum	79.4		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	63800		200	75.7	ug/L	2		6020B	Dissolved
Potassium	20000		200	64.9	ug/L	2		6020B	Dissolved
Calcium	45100		200	67.6	ug/L	2		6020B	Dissolved
Alkalinity	114		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW10 (185-195)-082818 — Lab Sample ID: 460-163526-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	22		5.0	5.0	ug/L	1		8260C	Total/NA
Phenol	2.0	J *	10	0.29	ug/L	1		8270D	Total/NA
Chloride	4.80		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate - DL	104	D	4.80	2.66	mg/L	8		9056A	Total/NA
Arsenic	3.9		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	9.4		4.0	1.1	ug/L	2		6020B	Total/NA
Nickel	1.5	J	4.0	1.3	ug/L	2		6020B	Total/NA
Vanadium	1.7	J	4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	85.9		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	25300		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	1310		200	65.7	ug/L	2		6020B	Total/NA
Potassium	7940		200	64.9	ug/L	2		6020B	Total/NA
Calcium	48200		200	67.6	ug/L	2		6020B	Total/NA
Arsenic	5.3		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	9.7		4.0	1.1	ug/L	2		6020B	Dissolved
Nickel	1.5	J	4.0	1.3	ug/L	2		6020B	Dissolved
Selenium	0.81	J	10.0	0.69	ug/L	2		6020B	Dissolved
Vanadium	1.7	J	4.0	1.2	ug/L	2		6020B	Dissolved
Aluminum	79.3		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	27000		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	973		200	65.7	ug/L	2		6020B	Dissolved
Potassium	8750		200	64.9	ug/L	2		6020B	Dissolved
Calcium	48200		200	67.6	ug/L	2		6020B	Dissolved
Alkalinity	70.0		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW12 (55-65)-082918 — Lab Sample ID: 460-163526-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	14		5.0	5.0	ug/L	1		8260C	Total/NA
Carbon disulfide	1.9		1.0	0.16	ug/L	1		8260C	Total/NA
Toluene	1.7		1.0	0.38	ug/L	1		8260C	Total/NA
Phenol	7.5	J *	10	0.29	ug/L	1		8270D	Total/NA
Isophorone	1.2	J	10	0.80	ug/L	1		8270D	Total/NA
Chloride - DL	43.6	D	2.28	1.48	mg/L	19		9056A	Total/NA
Sulfate - DL	266	D	11.4	6.31	mg/L	19		9056A	Total/NA
Arsenic	14.8		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	21.6		4.0	1.1	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW12 (55-65)-082918 (Continued) — Lab Sample ID: 460-163526-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	2.3	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.57	J	1.2	0.37	ug/L	2		6020B	Total/NA
Selenium	3.1	J	10.0	0.69	ug/L	2		6020B	Total/NA
Vanadium	2.3	J	4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	173		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	152000		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	412		200	65.7	ug/L	2		6020B	Total/NA
Potassium	15300		200	64.9	ug/L	2		6020B	Total/NA
Calcium	52900		200	67.6	ug/L	2		6020B	Total/NA
Arsenic	16.0		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	20.6		4.0	1.1	ug/L	2		6020B	Dissolved
Nickel	1.5	J	4.0	1.3	ug/L	2		6020B	Dissolved
Selenium	4.7	J	10.0	0.69	ug/L	2		6020B	Dissolved
Vanadium	1.8	J	4.0	1.2	ug/L	2		6020B	Dissolved
Aluminum	152		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	128000		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	893		200	65.7	ug/L	2		6020B	Dissolved
Potassium	14100		200	64.9	ug/L	2		6020B	Dissolved
Calcium	51100		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	15.5		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	77.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW12 (130-140)-082918 — Lab Sample ID: 460-163526-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3-Trichloropropane	0.0033	J	0.030	0.0030	ug/L	1		8260C SIM	Total/NA
Carbon disulfide	2.8		1.0	0.16	ug/L	1		8260C	Total/NA
Phenol	0.75	J	10	0.29	ug/L	1		8270D	Total/NA
Chloride	3.56		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	25.5		0.60	0.33	mg/L	1		9056A	Total/NA
Arsenic	5.6		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	11.9		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	3.5	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	12.2		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	31.6		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.93	J	1.2	0.37	ug/L	2		6020B	Total/NA
Zinc	29.5		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	413		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	29700		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	492		200	65.7	ug/L	2		6020B	Total/NA
Potassium	10100		200	64.9	ug/L	2		6020B	Total/NA
Calcium	23500		200	67.6	ug/L	2		6020B	Total/NA
Iron	475		120	45.7	ug/L	2		6020B	Total/NA
Arsenic	5.7		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	6.4		4.0	1.1	ug/L	2		6020B	Dissolved
Nickel	7.8		4.0	1.3	ug/L	2		6020B	Dissolved
Selenium	1.3	J	10.0	0.69	ug/L	2		6020B	Dissolved
Aluminum	124		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	27400		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	99.3	J	200	65.7	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW12 (130-140)-082918 (Continued) — Lab Sample ID: 460-163526-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	9570		200	64.9	ug/L	2		6020B	Dissolved
Calcium	21000		200	67.6	ug/L	2		6020B	Dissolved
Alkalinity	99.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: TB-04-082918 — Lab Sample ID: 460-163526-9

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW2 (279-289)-082818

Date Collected: 08/28/18 10:50
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 15:43	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 15:43	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*70 - 130*		*09/02/18 15:43*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 19:45	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 19:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 19:45	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 19:45	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 19:45	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 19:45	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 19:45	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 19:45	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 19:45	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 19:45	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 19:45	1
1,3-Dichlorobenzene	**0.51**	**J**	1.0	0.34	ug/L			09/01/18 19:45	1
1,4-Dichlorobenzene	**0.98**	**J**	1.0	0.76	ug/L			09/01/18 19:45	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 19:45	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 19:45	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 19:45	1
Acetone	**5.5**		5.0	5.0	ug/L			09/01/18 19:45	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 19:45	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 19:45	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 19:45	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/01/18 19:45	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 19:45	1
Chlorobenzene	**8.6**		1.0	0.38	ug/L			09/01/18 19:45	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 19:45	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 19:45	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 19:45	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 19:45	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 19:45	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 19:45	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 19:45	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 19:45	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 19:45	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 19:45	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 19:45	1
Isopropylbenzene	**0.35**	**J**	1.0	0.34	ug/L			09/01/18 19:45	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 19:45	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 19:45	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 19:45	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 19:45	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 19:45	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 19:45	1

Client Sample ID: RW2 (279-289)-082818
Date Collected: 08/28/18 10:50
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**0.44**	**J**	1.0	0.38	ug/L			09/01/18 19:45	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 19:45	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 19:45	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 19:45	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 19:45	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 19:45	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 19:45	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/18 19:45*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*09/01/18 19:45*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*09/01/18 19:45*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*09/01/18 19:45*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/01/18 19:45*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.1**		0.20	0.016	ug/L		08/31/18 09:08	08/31/18 16:37	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*08/31/18 09:08*	*08/31/18 16:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 14:26	09/02/18 05:02	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 14:26	09/02/18 05:02	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 14:26	09/02/18 05:02	1
Bis(2-chloroethyl)ether	**0.027**	**J**	0.030	0.026	ug/L		08/31/18 14:26	09/02/18 05:02	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/31/18 14:26	09/02/18 05:02	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/31/18 14:26	09/02/18 05:02	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/31/18 14:26	09/02/18 05:02	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 14:26	09/02/18 05:02	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/31/18 14:26	09/02/18 05:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**2.6**	**J ***	10	0.29	ug/L		08/31/18 14:26	09/01/18 05:43	1
2-Chlorophenol	0.38	U *	10	0.38	ug/L		08/31/18 14:26	09/01/18 05:43	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/31/18 14:26	09/01/18 05:43	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 05:43	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 05:43	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 05:43	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 14:26	09/01/18 05:43	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 05:43	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 14:26	09/01/18 05:43	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 14:26	09/01/18 05:43	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 14:26	09/01/18 05:43	1
4-Nitrophenol	0.69	U *	20	0.69	ug/L		08/31/18 14:26	09/01/18 05:43	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 14:26	09/01/18 05:43	1

Client Sample ID: RW2 (279-289)-082818
Date Collected: 08/28/18 10:50
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 14:26	09/01/18 05:43	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 14:26	09/01/18 05:43	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 14:26	09/01/18 05:43	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 14:26	09/01/18 05:43	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 05:43	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 14:26	09/01/18 05:43	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/31/18 14:26	09/01/18 05:43	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 05:43	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 14:26	09/01/18 05:43	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 05:43	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 14:26	09/01/18 05:43	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 14:26	09/01/18 05:43	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 14:26	09/01/18 05:43	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 14:26	09/01/18 05:43	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 14:26	09/01/18 05:43	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 05:43	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 05:43	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 14:26	09/01/18 05:43	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 14:26	09/01/18 05:43	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 14:26	09/01/18 05:43	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 14:26	09/01/18 05:43	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 14:26	09/01/18 05:43	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 14:26	09/01/18 05:43	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 05:43	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 05:43	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 05:43	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 14:26	09/01/18 05:43	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 05:43	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 05:43	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 14:26	09/01/18 05:43	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 14:26	09/01/18 05:43	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 14:26	09/01/18 05:43	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 14:26	09/01/18 05:43	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 14:26	09/01/18 05:43	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 14:26	09/01/18 05:43	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 05:43	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 05:43	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 14:26	09/01/18 05:43	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 14:26	09/01/18 05:43	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/31/18 14:26	09/01/18 05:43	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/31/18 14:26	09/01/18 05:43	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 05:43	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 05:43	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 05:43	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 05:43	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 05:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*7.3*	*J*	*ug/L*		*9.41*		*08/31/18 14:26*	*09/01/18 05:43*	*1*

Client Sample ID: RW2 (279-289)-082818

Date Collected: 08/28/18 10:50
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*93*		*30 - 130*	*08/31/18 14:26*	*09/01/18 05:43*	*1*
Phenol-d5 (Surr)	*30*		*15 - 110*	*08/31/18 14:26*	*09/01/18 05:43*	*1*
Terphenyl-d14 (Surr)	*88*		*30 - 130*	*08/31/18 14:26*	*09/01/18 05:43*	*1*
2,4,6-Tribromophenol (Surr)	*93*		*15 - 110*	*08/31/18 14:26*	*09/01/18 05:43*	*1*
2-Fluorophenol (Surr)	*47*		*15 - 110*	*08/31/18 14:26*	*09/01/18 05:43*	*1*
2-Fluorobiphenyl	*88*		*30 - 130*	*08/31/18 14:26*	*09/01/18 05:43*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:24	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:24	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:24	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:24	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:24	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:24	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 20:24	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 20:24	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 20:24	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 20:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*73*		*30 - 150*	*08/31/18 09:38*	*09/01/18 20:24*	*1*
Tetrachloro-m-xylene	*73*		*30 - 150*	*08/31/18 09:38*	*09/01/18 20:24*	*1*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*08/31/18 09:38*	*09/01/18 20:24*	*1*
DCB Decachlorobiphenyl	*73*		*30 - 150*	*08/31/18 09:38*	*09/01/18 20:24*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.33	U	0.60	0.33	mg/L			08/30/18 22:22	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.91**	**D**	0.24	0.16	mg/L			08/31/18 09:27	2

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**4.5**		2.0	1.4	ug/L		09/05/18 08:58	09/06/18 03:48	2
Arsenic	**7.1**		2.0	0.77	ug/L		09/05/18 08:58	09/06/18 03:48	2
Barium	**217**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 03:48	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 03:48	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 03:48	2
Cobalt	**13.8**		4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:48	2
Chromium	**2.2**	**J**	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:48	2
Copper	**2.5**	**J**	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 03:48	2
Manganese	**5730**		8.0	2.7	ug/L		09/05/18 08:58	09/06/18 03:48	2
Nickel	**12.4**		4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:48	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 03:48	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 03:48	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 03:48	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:58	09/06/18 03:48	2
Zinc	**15.4**	**J**	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 03:48	2

Client Sample ID: RW2 (279-289)-082818
Date Collected: 08/28/18 10:50
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-1
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**50.7**		40.0	15.0	ug/L		09/05/18 08:58	09/06/18 03:48	2
Sodium	**112000**		200	75.7	ug/L		09/05/18 08:58	09/06/18 03:48	2
Magnesium	**50100**		200	65.7	ug/L		09/05/18 08:58	09/06/18 03:48	2
Potassium	**7830**		200	64.9	ug/L		09/05/18 08:58	09/06/18 03:48	2
Calcium	**133000**		200	67.6	ug/L		09/05/18 08:58	09/06/18 03:48	2
Iron	**27500**		120	45.7	ug/L		09/05/18 08:58	09/06/18 03:48	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 03:48	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/10/18 16:34	09/10/18 17:25	2
Arsenic	**1.2**	**J**	2.0	0.77	ug/L		09/10/18 16:34	09/10/18 17:25	2
Barium	**109**		4.0	1.1	ug/L		09/10/18 16:34	09/10/18 17:25	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/10/18 16:34	09/10/18 17:25	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/10/18 16:34	09/10/18 17:25	2
Cobalt	**11.9**		4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:25	2
Chromium	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:25	2
Copper	1.9	U	4.0	1.9	ug/L		09/10/18 16:34	09/10/18 17:25	2
Manganese	**5400**		8.0	2.7	ug/L		09/10/18 16:34	09/10/18 17:25	2
Nickel	**10.6**		4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:25	2
Lead	0.37	U	1.2	0.37	ug/L		09/10/18 16:34	09/10/18 17:25	2
Antimony	0.62	U	2.0	0.62	ug/L		09/10/18 16:34	09/10/18 17:25	2
Selenium	0.69	U	10.0	0.69	ug/L		09/10/18 16:34	09/10/18 17:25	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/10/18 16:34	09/10/18 17:25	2
Zinc	5.4	U	16.0	5.4	ug/L		09/10/18 16:34	09/10/18 17:25	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/10/18 16:34	09/10/18 17:25	2
Sodium	**105000**		200	75.7	ug/L		09/10/18 16:34	09/10/18 17:25	2
Magnesium	**49300**		200	65.7	ug/L		09/10/18 16:34	09/10/18 17:25	2
Potassium	**7610**		200	64.9	ug/L		09/10/18 16:34	09/10/18 17:25	2
Calcium	**128000**		200	67.6	ug/L		09/10/18 16:34	09/10/18 17:25	2
Iron	45.7	U	120	45.7	ug/L		09/10/18 16:34	09/10/18 17:25	2
Thallium	0.24	U	0.80	0.24	ug/L		09/10/18 16:34	09/10/18 17:25	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 04:33	09/05/18 09:15	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 05:01	09/05/18 10:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 11:22	1
Bicarbonate Alkalinity as CaCO3	**621**		5.0	5.0	mg/L			08/31/18 10:50	1
Alkalinity	**621**		5.0	5.0	mg/L			08/31/18 10:50	1

Client Sample ID: RW2 (252-262)-082818

Date Collected: 08/28/18 11:30
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 16:08	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 16:08	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*70 - 130*		*09/02/18 16:08*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/03/18 01:10	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/03/18 01:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/03/18 01:10	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 01:10	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/03/18 01:10	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/03/18 01:10	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/03/18 01:10	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/03/18 01:10	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/03/18 01:10	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 01:10	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/03/18 01:10	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/03/18 01:10	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/03/18 01:10	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/03/18 01:10	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/03/18 01:10	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/03/18 01:10	1
Acetone	**13**		5.0	5.0	ug/L			09/03/18 01:10	1
Benzene	0.43	U	1.0	0.43	ug/L			09/03/18 01:10	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/03/18 01:10	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/03/18 01:10	1
Carbon disulfide	**4.2**		1.0	0.16	ug/L			09/03/18 01:10	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/03/18 01:10	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/03/18 01:10	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/03/18 01:10	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/03/18 01:10	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/03/18 01:10	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/03/18 01:10	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/03/18 01:10	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/03/18 01:10	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/03/18 01:10	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/03/18 01:10	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/03/18 01:10	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/03/18 01:10	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/03/18 01:10	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/03/18 01:10	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/03/18 01:10	1
Methyl tert-butyl ether	**0.48**	**J**	1.0	0.47	ug/L			09/03/18 01:10	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/03/18 01:10	1
Methylene Chloride	**0.34**	**J**	1.0	0.32	ug/L			09/03/18 01:10	1
Styrene	0.42	U	1.0	0.42	ug/L			09/03/18 01:10	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/03/18 01:10	1

Client Sample ID: RW2 (252-262)-082818
Date Collected: 08/28/18 11:30
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**0.82**	**J**	1.0	0.38	ug/L			09/03/18 01:10	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/03/18 01:10	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/03/18 01:10	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/03/18 01:10	1
Trichlorofluoromethane	0.14	U *	1.0	0.14	ug/L			09/03/18 01:10	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/03/18 01:10	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/03/18 01:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1-Propene, 2-methyl-	*13*	*J N*	*ug/L*		*1.80*	*115-11-7*		*09/03/18 01:10*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*09/03/18 01:10*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/03/18 01:10*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*09/03/18 01:10*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/03/18 01:10*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.82**		0.20	0.016	ug/L		08/31/18 09:08	08/31/18 16:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*41*		*10 - 150*	*08/31/18 09:08*	*08/31/18 16:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 14:26	09/02/18 05:24	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 14:26	09/02/18 05:24	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 14:26	09/02/18 05:24	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 14:26	09/02/18 05:24	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/31/18 14:26	09/02/18 05:24	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/31/18 14:26	09/02/18 05:24	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/31/18 14:26	09/02/18 05:24	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 14:26	09/02/18 05:24	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/31/18 14:26	09/02/18 05:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**8.2**	**J ***	10	0.29	ug/L		08/31/18 14:26	09/01/18 06:04	1
2-Chlorophenol	0.38	U *	10	0.38	ug/L		08/31/18 14:26	09/01/18 06:04	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/31/18 14:26	09/01/18 06:04	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 06:04	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 06:04	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 06:04	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 14:26	09/01/18 06:04	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 06:04	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 14:26	09/01/18 06:04	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 14:26	09/01/18 06:04	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 14:26	09/01/18 06:04	1
4-Nitrophenol	0.69	U *	20	0.69	ug/L		08/31/18 14:26	09/01/18 06:04	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 14:26	09/01/18 06:04	1

Client Sample ID: RW2 (252-262)-082818
Date Collected: 08/28/18 11:30
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 14:26	09/01/18 06:04	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 14:26	09/01/18 06:04	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 14:26	09/01/18 06:04	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 14:26	09/01/18 06:04	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 06:04	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 14:26	09/01/18 06:04	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/31/18 14:26	09/01/18 06:04	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 06:04	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 14:26	09/01/18 06:04	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 06:04	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 14:26	09/01/18 06:04	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 14:26	09/01/18 06:04	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 14:26	09/01/18 06:04	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 14:26	09/01/18 06:04	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 14:26	09/01/18 06:04	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 06:04	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 06:04	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 14:26	09/01/18 06:04	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 14:26	09/01/18 06:04	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 14:26	09/01/18 06:04	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 14:26	09/01/18 06:04	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 14:26	09/01/18 06:04	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 14:26	09/01/18 06:04	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 06:04	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 06:04	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 06:04	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 14:26	09/01/18 06:04	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 06:04	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 06:04	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 14:26	09/01/18 06:04	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 14:26	09/01/18 06:04	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 14:26	09/01/18 06:04	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 14:26	09/01/18 06:04	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 14:26	09/01/18 06:04	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 14:26	09/01/18 06:04	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 06:04	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 06:04	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 14:26	09/01/18 06:04	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 14:26	09/01/18 06:04	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/31/18 14:26	09/01/18 06:04	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/31/18 14:26	09/01/18 06:04	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 06:04	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 06:04	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 06:04	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 06:04	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 06:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*13*	*J*	*ug/L*		*6.09*		*08/31/18 14:26*	*09/01/18 06:04*	*1*

Client Sample ID: RW2 (252-262)-082818

Date Collected: 08/28/18 11:30
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-2

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*94*		*30 - 130*	*08/31/18 14:26*	*09/01/18 06:04*	*1*
Phenol-d5 (Surr)	*30*		*15 - 110*	*08/31/18 14:26*	*09/01/18 06:04*	*1*
Terphenyl-d14 (Surr)	*95*		*30 - 130*	*08/31/18 14:26*	*09/01/18 06:04*	*1*
2,4,6-Tribromophenol (Surr)	*91*		*15 - 110*	*08/31/18 14:26*	*09/01/18 06:04*	*1*
2-Fluorophenol (Surr)	*46*		*15 - 110*	*08/31/18 14:26*	*09/01/18 06:04*	*1*
2-Fluorobiphenyl	*90*		*30 - 130*	*08/31/18 14:26*	*09/01/18 06:04*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:39	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:39	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:39	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:39	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:39	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:39	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 20:39	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 20:39	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 20:39	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 20:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*69*		*30 - 150*	*08/31/18 09:38*	*09/01/18 20:39*	*1*
Tetrachloro-m-xylene	*70*		*30 - 150*	*08/31/18 09:38*	*09/01/18 20:39*	*1*
DCB Decachlorobiphenyl	*95*		*30 - 150*	*08/31/18 09:38*	*09/01/18 20:39*	*1*
DCB Decachlorobiphenyl	*92*		*30 - 150*	*08/31/18 09:38*	*09/01/18 20:39*	*1*

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**517**	**D**	12.0	7.80	mg/L			08/31/18 09:40	100
Sulfate	**166**	**D**	60.0	33.2	mg/L			08/31/18 09:40	100

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 03:51	2
Arsenic	**4.4**		2.0	0.77	ug/L		09/05/18 08:58	09/06/18 03:51	2
Barium	**54.1**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 03:51	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 03:51	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 03:51	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:51	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:51	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 03:51	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 08:58	09/06/18 03:51	2
Nickel	**5.7**		4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:51	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 03:51	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 03:51	2
Selenium	**2.3**	**J**	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 03:51	2
Vanadium	**10.3**		4.0	1.2	ug/L		09/05/18 08:58	09/06/18 03:51	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 03:51	2
Aluminum	**46.1**		40.0	15.0	ug/L		09/05/18 08:58	09/06/18 03:51	2
Sodium	**306000**		200	75.7	ug/L		09/05/18 08:58	09/06/18 03:51	2
Magnesium	65.7	U	200	65.7	ug/L		09/05/18 08:58	09/06/18 03:51	2

Client Sample ID: RW2 (252-262)-082818

Lab Sample ID: 460-163526-2

Date Collected: 08/28/18 11:30

Matrix: Water

Date Received: 08/29/18 14:10

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**58500**		200	64.9	ug/L		09/05/18 08:58	09/06/18 03:51	2
Calcium	**108000**		200	67.6	ug/L		09/05/18 08:58	09/06/18 03:51	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 08:58	09/06/18 03:51	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 03:51	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/10/18 16:34	09/10/18 17:33	2
Arsenic	**5.1**		2.0	0.77	ug/L		09/10/18 16:34	09/10/18 17:33	2
Barium	**53.9**		4.0	1.1	ug/L		09/10/18 16:34	09/10/18 17:33	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/10/18 16:34	09/10/18 17:33	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/10/18 16:34	09/10/18 17:33	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:33	2
Chromium	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:33	2
Copper	1.9	U	4.0	1.9	ug/L		09/10/18 16:34	09/10/18 17:33	2
Manganese	2.7	U	8.0	2.7	ug/L		09/10/18 16:34	09/10/18 17:33	2
Nickel	**4.8**		4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:33	2
Lead	0.37	U	1.2	0.37	ug/L		09/10/18 16:34	09/10/18 17:33	2
Antimony	0.62	U	2.0	0.62	ug/L		09/10/18 16:34	09/10/18 17:33	2
Selenium	**3.5**	**J**	10.0	0.69	ug/L		09/10/18 16:34	09/10/18 17:33	2
Vanadium	**12.2**		4.0	1.2	ug/L		09/10/18 16:34	09/10/18 17:33	2
Zinc	5.4	U	16.0	5.4	ug/L		09/10/18 16:34	09/10/18 17:33	2
Aluminum	**41.7**		40.0	15.0	ug/L		09/10/18 16:34	09/10/18 17:33	2
Sodium	**287000**		200	75.7	ug/L		09/10/18 16:34	09/10/18 17:33	2
Magnesium	65.7	U	200	65.7	ug/L		09/10/18 16:34	09/10/18 17:33	2
Potassium	**57300**		200	64.9	ug/L		09/10/18 16:34	09/10/18 17:33	2
Calcium	**107000**		200	67.6	ug/L		09/10/18 16:34	09/10/18 17:33	2
Iron	45.7	U	120	45.7	ug/L		09/10/18 16:34	09/10/18 17:33	2
Thallium	0.24	U	0.80	0.24	ug/L		09/10/18 16:34	09/10/18 17:33	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 04:33	09/05/18 09:17	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 05:01	09/05/18 10:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 11:23	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/31/18 09:11	1
Alkalinity	**80.9**		5.0	5.0	mg/L			08/31/18 09:11	1

Client Sample ID: RW10A (51-61)-082818

Lab Sample ID: 460-163526-3

Date Collected: 08/28/18 13:00

Matrix: Water

Date Received: 08/29/18 14:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 16:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Client Sample ID: RW10A (51-61)-082818
Date Collected: 08/28/18 13:00
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 16:33	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*73*		*70 - 130*		*09/02/18 16:33*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/03/18 01:34	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/03/18 01:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/03/18 01:34	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 01:34	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/03/18 01:34	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/03/18 01:34	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/03/18 01:34	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/03/18 01:34	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/03/18 01:34	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 01:34	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/03/18 01:34	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/03/18 01:34	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/03/18 01:34	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/03/18 01:34	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/03/18 01:34	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/03/18 01:34	1
Acetone	5.0	U	5.0	5.0	ug/L			09/03/18 01:34	1
Benzene	0.43	U	1.0	0.43	ug/L			09/03/18 01:34	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/03/18 01:34	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/03/18 01:34	1
Carbon disulfide	**0.41**	**J**	1.0	0.16	ug/L			09/03/18 01:34	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/03/18 01:34	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/03/18 01:34	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/03/18 01:34	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/03/18 01:34	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/03/18 01:34	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/03/18 01:34	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/03/18 01:34	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/03/18 01:34	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/03/18 01:34	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/03/18 01:34	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/03/18 01:34	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/03/18 01:34	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/03/18 01:34	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/03/18 01:34	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/03/18 01:34	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/03/18 01:34	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/03/18 01:34	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/03/18 01:34	1
Styrene	0.42	U	1.0	0.42	ug/L			09/03/18 01:34	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/03/18 01:34	1
Toluene	0.38	U	1.0	0.38	ug/L			09/03/18 01:34	1

Client Sample ID: RW10A (51-61)-082818
Date Collected: 08/28/18 13:00
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/03/18 01:34	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/03/18 01:34	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/03/18 01:34	1
Trichlorofluoromethane	0.14	U *	1.0	0.14	ug/L			09/03/18 01:34	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/03/18 01:34	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/03/18 01:34	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/03/18 01:34*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*09/03/18 01:34*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*09/03/18 01:34*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*09/03/18 01:34*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/03/18 01:34*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/31/18 09:08	08/31/18 17:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*08/31/18 09:08*	*08/31/18 17:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 14:26	09/02/18 05:45	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 14:26	09/02/18 05:45	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 14:26	09/02/18 05:45	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 14:26	09/02/18 05:45	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/31/18 14:26	09/02/18 05:45	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/31/18 14:26	09/02/18 05:45	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/31/18 14:26	09/02/18 05:45	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 14:26	09/02/18 05:45	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/31/18 14:26	09/02/18 05:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U *	10	0.29	ug/L		08/31/18 14:26	09/01/18 06:25	1
2-Chlorophenol	0.38	U *	10	0.38	ug/L		08/31/18 14:26	09/01/18 06:25	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/31/18 14:26	09/01/18 06:25	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 06:25	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 06:25	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 06:25	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 14:26	09/01/18 06:25	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 06:25	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 14:26	09/01/18 06:25	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 14:26	09/01/18 06:25	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 14:26	09/01/18 06:25	1
4-Nitrophenol	0.69	U *	20	0.69	ug/L		08/31/18 14:26	09/01/18 06:25	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 14:26	09/01/18 06:25	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 14:26	09/01/18 06:25	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Client Sample ID: RW10A (51-61)-082818
Date Collected: 08/28/18 13:00
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 14:26	09/01/18 06:25	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 14:26	09/01/18 06:25	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 14:26	09/01/18 06:25	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 06:25	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 14:26	09/01/18 06:25	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/31/18 14:26	09/01/18 06:25	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 06:25	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 14:26	09/01/18 06:25	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 06:25	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 14:26	09/01/18 06:25	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 14:26	09/01/18 06:25	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 14:26	09/01/18 06:25	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 14:26	09/01/18 06:25	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 14:26	09/01/18 06:25	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 06:25	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 06:25	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 14:26	09/01/18 06:25	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 14:26	09/01/18 06:25	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 14:26	09/01/18 06:25	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 14:26	09/01/18 06:25	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 14:26	09/01/18 06:25	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 14:26	09/01/18 06:25	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 06:25	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 06:25	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 06:25	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 14:26	09/01/18 06:25	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 06:25	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 06:25	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 14:26	09/01/18 06:25	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 14:26	09/01/18 06:25	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 14:26	09/01/18 06:25	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 14:26	09/01/18 06:25	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 14:26	09/01/18 06:25	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 14:26	09/01/18 06:25	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 06:25	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 06:25	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 14:26	09/01/18 06:25	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 14:26	09/01/18 06:25	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/31/18 14:26	09/01/18 06:25	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/31/18 14:26	09/01/18 06:25	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 06:25	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 06:25	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 06:25	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 06:25	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 06:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Diethyltoluamide	*39*	*J N*	*ug/L*		*7.42*	*134-62-3*	*08/31/18 14:26*	*09/01/18 06:25*	*1*

Client Sample ID: RW10A (51-61)-082818

Date Collected: 08/28/18 13:00
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*86*		*30 - 130*	*08/31/18 14:26*	*09/01/18 06:25*	*1*
Phenol-d5 (Surr)	*30*		*15 - 110*	*08/31/18 14:26*	*09/01/18 06:25*	*1*
Terphenyl-d14 (Surr)	*90*		*30 - 130*	*08/31/18 14:26*	*09/01/18 06:25*	*1*
2,4,6-Tribromophenol (Surr)	*81*		*15 - 110*	*08/31/18 14:26*	*09/01/18 06:25*	*1*
2-Fluorophenol (Surr)	*45*		*15 - 110*	*08/31/18 14:26*	*09/01/18 06:25*	*1*
2-Fluorobiphenyl	*81*		*30 - 130*	*08/31/18 14:26*	*09/01/18 06:25*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:55	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:55	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:55	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:55	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:55	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 20:55	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 20:55	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 20:55	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 20:55	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 20:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*65*		*30 - 150*	*08/31/18 09:38*	*09/01/18 20:55*	*1*
Tetrachloro-m-xylene	*65*		*30 - 150*	*08/31/18 09:38*	*09/01/18 20:55*	*1*
DCB Decachlorobiphenyl	*66*		*30 - 150*	*08/31/18 09:38*	*09/01/18 20:55*	*1*
DCB Decachlorobiphenyl	*63*		*30 - 150*	*08/31/18 09:38*	*09/01/18 20:55*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.81**		0.12	0.078	mg/L			08/30/18 23:15	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**43.6**	**D**	1.80	1.0	mg/L			08/31/18 09:54	3

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 03:54	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:58	09/06/18 03:54	2
Barium	**9.1**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 03:54	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 03:54	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 03:54	2
Cobalt	**15.8**		4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:54	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:54	2
Copper	**2.5**	**J**	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 03:54	2
Manganese	**4370**		8.0	2.7	ug/L		09/05/18 08:58	09/06/18 03:54	2
Nickel	**11.9**		4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:54	2
Lead	**0.40**	**J**	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 03:54	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 03:54	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 03:54	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:58	09/06/18 03:54	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 03:54	2

Client Sample ID: RW10A (51-61)-082818

Date Collected: 08/28/18 13:00
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-3

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**16.5**	**J**	40.0	15.0	ug/L		09/05/18 08:58	09/06/18 03:54	2
Sodium	**13500**		200	75.7	ug/L		09/05/18 08:58	09/06/18 03:54	2
Magnesium	**15700**		200	65.7	ug/L		09/05/18 08:58	09/06/18 03:54	2
Potassium	**2650**		200	64.9	ug/L		09/05/18 08:58	09/06/18 03:54	2
Calcium	**57300**		200	67.6	ug/L		09/05/18 08:58	09/06/18 03:54	2
Iron	**339**		120	45.7	ug/L		09/05/18 08:58	09/06/18 03:54	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 03:54	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/10/18 16:34	09/10/18 17:44	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/10/18 16:34	09/10/18 17:44	2
Barium	**8.2**		4.0	1.1	ug/L		09/10/18 16:34	09/10/18 17:44	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/10/18 16:34	09/10/18 17:44	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/10/18 16:34	09/10/18 17:44	2
Cobalt	**15.5**		4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:44	2
Chromium	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:44	2
Copper	1.9	U	4.0	1.9	ug/L		09/10/18 16:34	09/10/18 17:44	2
Manganese	**4580**		8.0	2.7	ug/L		09/10/18 16:34	09/10/18 17:44	2
Nickel	**12.7**		4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:44	2
Lead	0.37	U	1.2	0.37	ug/L		09/10/18 16:34	09/10/18 17:44	2
Antimony	0.62	U	2.0	0.62	ug/L		09/10/18 16:34	09/10/18 17:44	2
Selenium	0.69	U	10.0	0.69	ug/L		09/10/18 16:34	09/10/18 17:44	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/10/18 16:34	09/10/18 17:44	2
Zinc	5.4	U	16.0	5.4	ug/L		09/10/18 16:34	09/10/18 17:44	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/10/18 16:34	09/10/18 17:44	2
Sodium	**12400**		200	75.7	ug/L		09/10/18 16:34	09/10/18 17:44	2
Magnesium	**13700**		200	65.7	ug/L		09/10/18 16:34	09/10/18 17:44	2
Potassium	**2450**		200	64.9	ug/L		09/10/18 16:34	09/10/18 17:44	2
Calcium	**54200**		200	67.6	ug/L		09/10/18 16:34	09/10/18 17:44	2
Iron	45.7	U	120	45.7	ug/L		09/10/18 16:34	09/10/18 17:44	2
Thallium	0.24	U	0.80	0.24	ug/L		09/10/18 16:34	09/10/18 17:44	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 04:33	09/05/18 09:19	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 05:37	09/05/18 10:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.0020**	**J**	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 11:24	1
Bicarbonate Alkalinity as CaCO3	**185**		5.0	5.0	mg/L			08/31/18 10:39	1
Alkalinity	**185**		5.0	5.0	mg/L			08/31/18 10:39	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Client Sample ID: RW10A (75-85)-082818
Date Collected: 08/28/18 13:20
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 16:58	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 16:58	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*70 - 130*		*09/02/18 16:58*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 20:08	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 20:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 20:08	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 20:08	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 20:08	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 20:08	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 20:08	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 20:08	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 20:08	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 20:08	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 20:08	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 20:08	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 20:08	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 20:08	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 20:08	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 20:08	1
Acetone	5.0	U	5.0	5.0	ug/L			09/01/18 20:08	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 20:08	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 20:08	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 20:08	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/01/18 20:08	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 20:08	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 20:08	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 20:08	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 20:08	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 20:08	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 20:08	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 20:08	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 20:08	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 20:08	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 20:08	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 20:08	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 20:08	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 20:08	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 20:08	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 20:08	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 20:08	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 20:08	1
Methylene Chloride	**0.48**	**J**	1.0	0.32	ug/L			09/01/18 20:08	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 20:08	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 20:08	1

Client Sample ID: RW10A (75-85)-082818
Date Collected: 08/28/18 13:20
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 20:08	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 20:08	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 20:08	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 20:08	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 20:08	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 20:08	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 20:08	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/18 20:08*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*09/01/18 20:08*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/01/18 20:08*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*09/01/18 20:08*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/01/18 20:08*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/31/18 09:08	08/31/18 17:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*10 - 150*	*08/31/18 09:08*	*08/31/18 17:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**0.11**		0.050	0.016	ug/L		08/31/18 14:26	09/02/18 06:06	1
Benzo[a]pyrene	**0.063**		0.050	0.022	ug/L		08/31/18 14:26	09/02/18 06:06	1
Benzo[b]fluoranthene	**0.17**		0.050	0.024	ug/L		08/31/18 14:26	09/02/18 06:06	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 14:26	09/02/18 06:06	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/31/18 14:26	09/02/18 06:06	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/31/18 14:26	09/02/18 06:06	1
Indeno[1,2,3-cd]pyrene	**0.070**		0.050	0.036	ug/L		08/31/18 14:26	09/02/18 06:06	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 14:26	09/02/18 06:06	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/31/18 14:26	09/02/18 06:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U *	10	0.29	ug/L		08/31/18 14:26	09/01/18 06:46	1
2-Chlorophenol	0.38	U *	10	0.38	ug/L		08/31/18 14:26	09/01/18 06:46	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/31/18 14:26	09/01/18 06:46	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 06:46	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 06:46	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 06:46	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 14:26	09/01/18 06:46	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 06:46	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 14:26	09/01/18 06:46	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 14:26	09/01/18 06:46	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 14:26	09/01/18 06:46	1
4-Nitrophenol	0.69	U *	20	0.69	ug/L		08/31/18 14:26	09/01/18 06:46	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 14:26	09/01/18 06:46	1

Client Sample ID: RW10A (75-85)-082818
Date Collected: 08/28/18 13:20
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 14:26	09/01/18 06:46	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 14:26	09/01/18 06:46	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 14:26	09/01/18 06:46	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 14:26	09/01/18 06:46	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 06:46	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 14:26	09/01/18 06:46	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/31/18 14:26	09/01/18 06:46	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 06:46	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 14:26	09/01/18 06:46	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 06:46	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 14:26	09/01/18 06:46	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 14:26	09/01/18 06:46	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 14:26	09/01/18 06:46	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 14:26	09/01/18 06:46	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 14:26	09/01/18 06:46	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 06:46	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 06:46	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 14:26	09/01/18 06:46	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 14:26	09/01/18 06:46	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 14:26	09/01/18 06:46	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 14:26	09/01/18 06:46	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 14:26	09/01/18 06:46	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 14:26	09/01/18 06:46	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 06:46	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 06:46	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 06:46	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 14:26	09/01/18 06:46	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 06:46	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 06:46	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 14:26	09/01/18 06:46	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 14:26	09/01/18 06:46	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 14:26	09/01/18 06:46	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 14:26	09/01/18 06:46	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 14:26	09/01/18 06:46	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 14:26	09/01/18 06:46	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 06:46	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 06:46	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 14:26	09/01/18 06:46	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 14:26	09/01/18 06:46	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/31/18 14:26	09/01/18 06:46	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/31/18 14:26	09/01/18 06:46	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 06:46	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 06:46	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 06:46	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 06:46	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 06:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/31/18 14:26*	*09/01/18 06:46*	*1*

Client Sample ID: RW10A (75-85)-082818

Date Collected: 08/28/18 13:20
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-4

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*86*		*30 - 130*	*08/31/18 14:26*	*09/01/18 06:46*	*1*
Phenol-d5 (Surr)	*26*		*15 - 110*	*08/31/18 14:26*	*09/01/18 06:46*	*1*
Terphenyl-d14 (Surr)	*90*		*30 - 130*	*08/31/18 14:26*	*09/01/18 06:46*	*1*
2,4,6-Tribromophenol (Surr)	*77*		*15 - 110*	*08/31/18 14:26*	*09/01/18 06:46*	*1*
2-Fluorophenol (Surr)	*41*		*15 - 110*	*08/31/18 14:26*	*09/01/18 06:46*	*1*
2-Fluorobiphenyl	*82*		*30 - 130*	*08/31/18 14:26*	*09/01/18 06:46*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:11	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:11	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:11	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:11	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:11	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:11	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:11	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:11	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:11	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*48*		*30 - 150*	*08/31/18 09:38*	*09/01/18 21:11*	*1*
Tetrachloro-m-xylene	*47*		*30 - 150*	*08/31/18 09:38*	*09/01/18 21:11*	*1*
DCB Decachlorobiphenyl	*74*		*30 - 150*	*08/31/18 09:38*	*09/01/18 21:11*	*1*
DCB Decachlorobiphenyl	*70*		*30 - 150*	*08/31/18 09:38*	*09/01/18 21:11*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.23**		0.12	0.078	mg/L			08/30/18 23:41	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**36.9**	**D F2**	1.80	1.0	mg/L			08/31/18 10:09	3

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 03:57	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:58	09/06/18 03:57	2
Barium	**6.3**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 03:57	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 03:57	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 03:57	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:57	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:57	2
Copper	**2.6**	**J**	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 03:57	2
Manganese	**14.3**		8.0	2.7	ug/L		09/05/18 08:58	09/06/18 03:57	2
Nickel	**1.3**	**J**	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:57	2
Lead	**1.1**	**J**	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 03:57	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 03:57	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 03:57	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:58	09/06/18 03:57	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 03:57	2

Client Sample ID: RW10A (75-85)-082818
Date Collected: 08/28/18 13:20
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-4
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**67.3**		40.0	15.0	ug/L		09/05/18 08:58	09/06/18 03:57	2
Sodium	**5570**		200	75.7	ug/L		09/05/18 08:58	09/06/18 03:57	2
Magnesium	**15300**		200	65.7	ug/L		09/05/18 08:58	09/06/18 03:57	2
Potassium	**2040**		200	64.9	ug/L		09/05/18 08:58	09/06/18 03:57	2
Calcium	**48500**		200	67.6	ug/L		09/05/18 08:58	09/06/18 03:57	2
Iron	**105**	**J**	120	45.7	ug/L		09/05/18 08:58	09/06/18 03:57	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 03:57	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/10/18 16:34	09/10/18 17:47	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/10/18 16:34	09/10/18 17:47	2
Barium	**6.1**		4.0	1.1	ug/L		09/10/18 16:34	09/10/18 17:47	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/10/18 16:34	09/10/18 17:47	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/10/18 16:34	09/10/18 17:47	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:47	2
Chromium	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:47	2
Copper	1.9	U	4.0	1.9	ug/L		09/10/18 16:34	09/10/18 17:47	2
Manganese	2.7	U	8.0	2.7	ug/L		09/10/18 16:34	09/10/18 17:47	2
Nickel	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:47	2
Lead	0.37	U	1.2	0.37	ug/L		09/10/18 16:34	09/10/18 17:47	2
Antimony	0.62	U	2.0	0.62	ug/L		09/10/18 16:34	09/10/18 17:47	2
Selenium	0.69	U	10.0	0.69	ug/L		09/10/18 16:34	09/10/18 17:47	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/10/18 16:34	09/10/18 17:47	2
Zinc	5.4	U	16.0	5.4	ug/L		09/10/18 16:34	09/10/18 17:47	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/10/18 16:34	09/10/18 17:47	2
Sodium	**5040**		200	75.7	ug/L		09/10/18 16:34	09/10/18 17:47	2
Magnesium	**13800**		200	65.7	ug/L		09/10/18 16:34	09/10/18 17:47	2
Potassium	**2010**		200	64.9	ug/L		09/10/18 16:34	09/10/18 17:47	2
Calcium	**48400**		200	67.6	ug/L		09/10/18 16:34	09/10/18 17:47	2
Iron	45.7	U	120	45.7	ug/L		09/10/18 16:34	09/10/18 17:47	2
Thallium	0.24	U	0.80	0.24	ug/L		09/10/18 16:34	09/10/18 17:47	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 04:33	09/05/18 09:20	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 05:37	09/05/18 10:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 11:25	1
Bicarbonate Alkalinity as CaCO3	**148**		5.0	5.0	mg/L			08/31/18 09:54	1
Alkalinity	**148**		5.0	5.0	mg/L			08/31/18 09:54	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Client Sample ID: RW10 (120-130)-082818
Date Collected: 08/28/18 14:20
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 17:23	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 17:23	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*70 - 130*		*09/02/18 17:23*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 20:31	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 20:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 20:31	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 20:31	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 20:31	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 20:31	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 20:31	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 20:31	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 20:31	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 20:31	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 20:31	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 20:31	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 20:31	1
2-Butanone (MEK)	**4.7**	**J**	5.0	1.9	ug/L			09/01/18 20:31	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 20:31	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 20:31	1
Acetone	**56**		5.0	5.0	ug/L			09/01/18 20:31	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 20:31	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 20:31	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 20:31	1
Carbon disulfide	**0.38**	**J**	1.0	0.16	ug/L			09/01/18 20:31	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 20:31	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 20:31	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 20:31	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 20:31	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 20:31	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 20:31	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 20:31	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 20:31	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 20:31	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 20:31	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 20:31	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 20:31	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 20:31	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 20:31	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 20:31	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 20:31	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 20:31	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 20:31	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 20:31	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 20:31	1

Client Sample ID: RW10 (120-130)-082818
Date Collected: 08/28/18 14:20
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 20:31	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 20:31	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 20:31	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 20:31	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 20:31	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 20:31	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 20:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/18 20:31*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*09/01/18 20:31*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/01/18 20:31*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*09/01/18 20:31*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/01/18 20:31*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/31/18 09:08	08/31/18 17:48	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*10 - 150*	*08/31/18 09:08*	*08/31/18 17:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 14:26	09/02/18 06:27	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 14:26	09/02/18 06:27	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 14:26	09/02/18 06:27	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 14:26	09/02/18 06:27	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/31/18 14:26	09/02/18 06:27	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/31/18 14:26	09/02/18 06:27	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/31/18 14:26	09/02/18 06:27	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 14:26	09/02/18 06:27	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/31/18 14:26	09/02/18 06:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**7.7**	**J ***	10	0.29	ug/L		08/31/18 14:26	09/01/18 07:07	1
2-Chlorophenol	0.38	U *	10	0.38	ug/L		08/31/18 14:26	09/01/18 07:07	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/31/18 14:26	09/01/18 07:07	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 07:07	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 07:07	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 07:07	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 14:26	09/01/18 07:07	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 07:07	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 14:26	09/01/18 07:07	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 14:26	09/01/18 07:07	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 14:26	09/01/18 07:07	1
4-Nitrophenol	0.69	U *	20	0.69	ug/L		08/31/18 14:26	09/01/18 07:07	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 14:26	09/01/18 07:07	1

Client Sample ID: RW10 (120-130)-082818
Date Collected: 08/28/18 14:20
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 14:26	09/01/18 07:07	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 14:26	09/01/18 07:07	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 14:26	09/01/18 07:07	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 14:26	09/01/18 07:07	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 07:07	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 14:26	09/01/18 07:07	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/31/18 14:26	09/01/18 07:07	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 07:07	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 14:26	09/01/18 07:07	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 07:07	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 14:26	09/01/18 07:07	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 14:26	09/01/18 07:07	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 14:26	09/01/18 07:07	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 14:26	09/01/18 07:07	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 14:26	09/01/18 07:07	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 07:07	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 07:07	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 14:26	09/01/18 07:07	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 14:26	09/01/18 07:07	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 14:26	09/01/18 07:07	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 14:26	09/01/18 07:07	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 14:26	09/01/18 07:07	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 14:26	09/01/18 07:07	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 07:07	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 07:07	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 07:07	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 14:26	09/01/18 07:07	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 07:07	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 07:07	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 14:26	09/01/18 07:07	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 14:26	09/01/18 07:07	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 14:26	09/01/18 07:07	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 14:26	09/01/18 07:07	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 14:26	09/01/18 07:07	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 14:26	09/01/18 07:07	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 07:07	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 07:07	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 14:26	09/01/18 07:07	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 14:26	09/01/18 07:07	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/31/18 14:26	09/01/18 07:07	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/31/18 14:26	09/01/18 07:07	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 07:07	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 07:07	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 07:07	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 07:07	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 07:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/31/18 14:26*	*09/01/18 07:07*	*1*

Client Sample ID: RW10 (120-130)-082818

Date Collected: 08/28/18 14:20
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	89		30 - 130	08/31/18 14:26	09/01/18 07:07	1
Phenol-d5 (Surr)	30		15 - 110	08/31/18 14:26	09/01/18 07:07	1
Terphenyl-d14 (Surr)	92		30 - 130	08/31/18 14:26	09/01/18 07:07	1
2,4,6-Tribromophenol (Surr)	86		15 - 110	08/31/18 14:26	09/01/18 07:07	1
2-Fluorophenol (Surr)	46		15 - 110	08/31/18 14:26	09/01/18 07:07	1
2-Fluorobiphenyl	84		30 - 130	08/31/18 14:26	09/01/18 07:07	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:27	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:27	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:27	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:27	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:27	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:27	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:27	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:27	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:27	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	59		30 - 150	08/31/18 09:38	09/01/18 21:27	1
Tetrachloro-m-xylene	62		30 - 150	08/31/18 09:38	09/01/18 21:27	1
DCB Decachlorobiphenyl	90		30 - 150	08/31/18 09:38	09/01/18 21:27	1
DCB Decachlorobiphenyl	94		30 - 150	08/31/18 09:38	09/01/18 21:27	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.76**	**D**	1.20	0.78	mg/L			08/31/18 12:05	10
Sulfate	**133**	**D**	6.00	3.32	mg/L			08/31/18 12:05	10

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 03:59	2
Arsenic	**8.1**		2.0	0.77	ug/L		09/05/18 08:58	09/06/18 03:59	2
Barium	**13.6**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 03:59	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 03:59	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 03:59	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:59	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:59	2
Copper	**4.2**		4.0	1.9	ug/L		09/05/18 08:58	09/06/18 03:59	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 08:58	09/06/18 03:59	2
Nickel	**9.1**		4.0	1.3	ug/L		09/05/18 08:58	09/06/18 03:59	2
Lead	**1.2**		1.2	0.37	ug/L		09/05/18 08:58	09/06/18 03:59	2
Antimony	**0.86**	**J**	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 03:59	2
Selenium	**2.1**	**J**	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 03:59	2
Vanadium	**5.1**		4.0	1.2	ug/L		09/05/18 08:58	09/06/18 03:59	2
Zinc	**5.7**	**J**	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 03:59	2
Aluminum	**107**		40.0	15.0	ug/L		09/05/18 08:58	09/06/18 03:59	2
Sodium	**69500**		200	75.7	ug/L		09/05/18 08:58	09/06/18 03:59	2
Magnesium	65.7	U	200	65.7	ug/L		09/05/18 08:58	09/06/18 03:59	2

Client Sample ID: RW10 (120-130)-082818

Lab Sample ID: 460-163526-5

Date Collected: 08/28/18 14:20

Matrix: Water

Date Received: 08/29/18 14:10

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**19900**		200	64.9	ug/L		09/05/18 08:58	09/06/18 03:59	2
Calcium	**45600**		200	67.6	ug/L		09/05/18 08:58	09/06/18 03:59	2
Iron	**109**	**J**	120	45.7	ug/L		09/05/18 08:58	09/06/18 03:59	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 03:59	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/10/18 16:34	09/10/18 17:52	2
Arsenic	**7.5**		2.0	0.77	ug/L		09/10/18 16:34	09/10/18 17:52	2
Barium	**13.1**		4.0	1.1	ug/L		09/10/18 16:34	09/10/18 17:52	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/10/18 16:34	09/10/18 17:52	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/10/18 16:34	09/10/18 17:52	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:52	2
Chromium	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:52	2
Copper	1.9	U	4.0	1.9	ug/L		09/10/18 16:34	09/10/18 17:52	2
Manganese	2.7	U	8.0	2.7	ug/L		09/10/18 16:34	09/10/18 17:52	2
Nickel	**8.3**		4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:52	2
Lead	0.37	U	1.2	0.37	ug/L		09/10/18 16:34	09/10/18 17:52	2
Antimony	0.62	U	2.0	0.62	ug/L		09/10/18 16:34	09/10/18 17:52	2
Selenium	**3.2**	**J**	10.0	0.69	ug/L		09/10/18 16:34	09/10/18 17:52	2
Vanadium	**5.6**		4.0	1.2	ug/L		09/10/18 16:34	09/10/18 17:52	2
Zinc	5.4	U	16.0	5.4	ug/L		09/10/18 16:34	09/10/18 17:52	2
Aluminum	**79.4**		40.0	15.0	ug/L		09/10/18 16:34	09/10/18 17:52	2
Sodium	**63800**		200	75.7	ug/L		09/10/18 16:34	09/10/18 17:52	2
Magnesium	65.7	U	200	65.7	ug/L		09/10/18 16:34	09/10/18 17:52	2
Potassium	**20000**		200	64.9	ug/L		09/10/18 16:34	09/10/18 17:52	2
Calcium	**45100**		200	67.6	ug/L		09/10/18 16:34	09/10/18 17:52	2
Iron	45.7	U	120	45.7	ug/L		09/10/18 16:34	09/10/18 17:52	2
Thallium	0.24	U	0.80	0.24	ug/L		09/10/18 16:34	09/10/18 17:52	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 04:33	09/05/18 09:22	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 05:37	09/05/18 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 12:57	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/31/18 09:02	1
Alkalinity	**114**		5.0	5.0	mg/L			08/31/18 09:02	1

Client Sample ID: RW10 (185-195)-082818

Lab Sample ID: 460-163526-6

Date Collected: 08/28/18 14:35

Matrix: Water

Date Received: 08/29/18 14:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 17:49	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Client Sample ID: RW10 (185-195)-082818
Date Collected: 08/28/18 14:35
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 17:49	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*70 - 130*		*09/02/18 17:49*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 20:55	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 20:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 20:55	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 20:55	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 20:55	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 20:55	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 20:55	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 20:55	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 20:55	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 20:55	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 20:55	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 20:55	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 20:55	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 20:55	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 20:55	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 20:55	1
Acetone	**22**		5.0	5.0	ug/L			09/01/18 20:55	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 20:55	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 20:55	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 20:55	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/01/18 20:55	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 20:55	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 20:55	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 20:55	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 20:55	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 20:55	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 20:55	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 20:55	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 20:55	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 20:55	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 20:55	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 20:55	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 20:55	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 20:55	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 20:55	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 20:55	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 20:55	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 20:55	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 20:55	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 20:55	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 20:55	1
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 20:55	1

Client Sample ID: RW10 (185-195)-082818
Date Collected: 08/28/18 14:35
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 20:55	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 20:55	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 20:55	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 20:55	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 20:55	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 20:55	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/18 20:55*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*09/01/18 20:55*	*1*
4-Bromofluorobenzene	*97*		*70 - 130*		*09/01/18 20:55*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*09/01/18 20:55*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/01/18 20:55*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/31/18 09:08	08/31/18 18:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*08/31/18 09:08*	*08/31/18 18:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 14:26	09/02/18 06:48	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 14:26	09/02/18 06:48	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 14:26	09/02/18 06:48	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 14:26	09/02/18 06:48	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/31/18 14:26	09/02/18 06:48	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/31/18 14:26	09/02/18 06:48	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/31/18 14:26	09/02/18 06:48	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 14:26	09/02/18 06:48	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/31/18 14:26	09/02/18 06:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**2.0**	**J ***	10	0.29	ug/L		08/31/18 14:26	09/01/18 07:28	1
2-Chlorophenol	0.38	U *	10	0.38	ug/L		08/31/18 14:26	09/01/18 07:28	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/31/18 14:26	09/01/18 07:28	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 07:28	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 07:28	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 07:28	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 14:26	09/01/18 07:28	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 07:28	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 14:26	09/01/18 07:28	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 14:26	09/01/18 07:28	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 14:26	09/01/18 07:28	1
4-Nitrophenol	0.69	U *	20	0.69	ug/L		08/31/18 14:26	09/01/18 07:28	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 14:26	09/01/18 07:28	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 14:26	09/01/18 07:28	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Client Sample ID: RW10 (185-195)-082818
Date Collected: 08/28/18 14:35
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 14:26	09/01/18 07:28	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 14:26	09/01/18 07:28	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 14:26	09/01/18 07:28	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 07:28	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 14:26	09/01/18 07:28	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/31/18 14:26	09/01/18 07:28	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 07:28	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 14:26	09/01/18 07:28	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 07:28	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 14:26	09/01/18 07:28	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 14:26	09/01/18 07:28	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 14:26	09/01/18 07:28	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 14:26	09/01/18 07:28	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 14:26	09/01/18 07:28	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 07:28	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 07:28	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 14:26	09/01/18 07:28	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 14:26	09/01/18 07:28	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 14:26	09/01/18 07:28	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 14:26	09/01/18 07:28	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 14:26	09/01/18 07:28	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 14:26	09/01/18 07:28	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 07:28	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 07:28	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 07:28	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 14:26	09/01/18 07:28	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 07:28	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 07:28	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 14:26	09/01/18 07:28	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 14:26	09/01/18 07:28	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 14:26	09/01/18 07:28	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 14:26	09/01/18 07:28	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 14:26	09/01/18 07:28	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 14:26	09/01/18 07:28	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 07:28	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 07:28	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 14:26	09/01/18 07:28	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 14:26	09/01/18 07:28	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/31/18 14:26	09/01/18 07:28	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/31/18 14:26	09/01/18 07:28	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 07:28	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 07:28	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 07:28	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 07:28	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 07:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/31/18 14:26*	*09/01/18 07:28*	*1*

Client Sample ID: RW10 (185-195)-082818
Date Collected: 08/28/18 14:35
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	88		30 - 130	08/31/18 14:26	09/01/18 07:28	1
Phenol-d5 (Surr)	27		15 - 110	08/31/18 14:26	09/01/18 07:28	1
Terphenyl-d14 (Surr)	91		30 - 130	08/31/18 14:26	09/01/18 07:28	1
2,4,6-Tribromophenol (Surr)	80		15 - 110	08/31/18 14:26	09/01/18 07:28	1
2-Fluorophenol (Surr)	43		15 - 110	08/31/18 14:26	09/01/18 07:28	1
2-Fluorobiphenyl	85		30 - 130	08/31/18 14:26	09/01/18 07:28	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:43	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:43	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:43	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:43	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:43	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:43	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:43	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:43	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:43	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	69		30 - 150	08/31/18 09:38	09/01/18 21:43	1
Tetrachloro-m-xylene	70		30 - 150	08/31/18 09:38	09/01/18 21:43	1
DCB Decachlorobiphenyl	90		30 - 150	08/31/18 09:38	09/01/18 21:43	1
DCB Decachlorobiphenyl	90		30 - 150	08/31/18 09:38	09/01/18 21:43	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.80**		0.12	0.078	mg/L			08/31/18 01:12	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**104**	**D**	4.80	2.66	mg/L			08/31/18 12:19	8

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 04:02	2
Arsenic	**3.9**		2.0	0.77	ug/L		09/05/18 08:58	09/06/18 04:02	2
Barium	**9.4**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 04:02	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 04:02	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 04:02	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:02	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:02	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 04:02	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 08:58	09/06/18 04:02	2
Nickel	**1.5**	**J**	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:02	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 04:02	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 04:02	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 04:02	2
Vanadium	**1.7**	**J**	4.0	1.2	ug/L		09/05/18 08:58	09/06/18 04:02	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 04:02	2

Client Sample ID: RW10 (185-195)-082818

Date Collected: 08/28/18 14:35
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-6

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**85.9**		40.0	15.0	ug/L		09/05/18 08:58	09/06/18 04:02	2
Sodium	**25300**		200	75.7	ug/L		09/05/18 08:58	09/06/18 04:02	2
Magnesium	**1310**		200	65.7	ug/L		09/05/18 08:58	09/06/18 04:02	2
Potassium	**7940**		200	64.9	ug/L		09/05/18 08:58	09/06/18 04:02	2
Calcium	**48200**		200	67.6	ug/L		09/05/18 08:58	09/06/18 04:02	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 08:58	09/06/18 04:02	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 04:02	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/10/18 16:34	09/10/18 17:55	2
Arsenic	**5.3**		2.0	0.77	ug/L		09/10/18 16:34	09/10/18 17:55	2
Barium	**9.7**		4.0	1.1	ug/L		09/10/18 16:34	09/10/18 17:55	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/10/18 16:34	09/10/18 17:55	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/10/18 16:34	09/10/18 17:55	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:55	2
Chromium	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:55	2
Copper	1.9	U	4.0	1.9	ug/L		09/10/18 16:34	09/10/18 17:55	2
Manganese	2.7	U	8.0	2.7	ug/L		09/10/18 16:34	09/10/18 17:55	2
Nickel	**1.5**	**J**	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:55	2
Lead	0.37	U	1.2	0.37	ug/L		09/10/18 16:34	09/10/18 17:55	2
Antimony	0.62	U	2.0	0.62	ug/L		09/10/18 16:34	09/10/18 17:55	2
Selenium	**0.81**	**J**	10.0	0.69	ug/L		09/10/18 16:34	09/10/18 17:55	2
Vanadium	**1.7**	**J**	4.0	1.2	ug/L		09/10/18 16:34	09/10/18 17:55	2
Zinc	5.4	U	16.0	5.4	ug/L		09/10/18 16:34	09/10/18 17:55	2
Aluminum	**79.3**		40.0	15.0	ug/L		09/10/18 16:34	09/10/18 17:55	2
Sodium	**27000**		200	75.7	ug/L		09/10/18 16:34	09/10/18 17:55	2
Magnesium	**973**		200	65.7	ug/L		09/10/18 16:34	09/10/18 17:55	2
Potassium	**8750**		200	64.9	ug/L		09/10/18 16:34	09/10/18 17:55	2
Calcium	**48200**		200	67.6	ug/L		09/10/18 16:34	09/10/18 17:55	2
Iron	45.7	U	120	45.7	ug/L		09/10/18 16:34	09/10/18 17:55	2
Thallium	0.24	U	0.80	0.24	ug/L		09/10/18 16:34	09/10/18 17:55	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 04:33	09/05/18 09:27	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 05:37	09/05/18 10:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 12:58	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/31/18 08:53	1
Alkalinity	**70.0**		5.0	5.0	mg/L			08/31/18 08:53	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Client Sample ID: RW12 (55-65)-082918
Date Collected: 08/29/18 08:50
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 18:14	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 18:14	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*70 - 130*		*09/02/18 18:14*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 21:18	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 21:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 21:18	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 21:18	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 21:18	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 21:18	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 21:18	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 21:18	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 21:18	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 21:18	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 21:18	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 21:18	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 21:18	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 21:18	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 21:18	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 21:18	1
Acetone	**14**		5.0	5.0	ug/L			09/01/18 21:18	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 21:18	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 21:18	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 21:18	1
Carbon disulfide	**1.9**		1.0	0.16	ug/L			09/01/18 21:18	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 21:18	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 21:18	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 21:18	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 21:18	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 21:18	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 21:18	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 21:18	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 21:18	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 21:18	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 21:18	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 21:18	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 21:18	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 21:18	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 21:18	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 21:18	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 21:18	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 21:18	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 21:18	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 21:18	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 21:18	1

Client Sample ID: RW12 (55-65)-082918
Date Collected: 08/29/18 08:50
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**1.7**		1.0	0.38	ug/L			09/01/18 21:18	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 21:18	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 21:18	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 21:18	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 21:18	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 21:18	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 21:18	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1-Hexanol, 2-ethyl-	*10*	*J N*	*ug/L*		*11.05*	*104-76-7*		*09/01/18 21:18*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*09/01/18 21:18*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*09/01/18 21:18*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*09/01/18 21:18*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/01/18 21:18*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/31/18 09:08	08/31/18 18:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*42*		*10 - 150*	*08/31/18 09:08*	*08/31/18 18:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 14:26	09/02/18 07:10	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 14:26	09/02/18 07:10	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 14:26	09/02/18 07:10	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 14:26	09/02/18 07:10	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/31/18 14:26	09/02/18 07:10	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		08/31/18 14:26	09/02/18 07:10	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/31/18 14:26	09/02/18 07:10	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 14:26	09/02/18 07:10	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/31/18 14:26	09/02/18 07:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**7.5**	**J ***	10	0.29	ug/L		08/31/18 14:26	09/01/18 07:48	1
2-Chlorophenol	0.38	U *	10	0.38	ug/L		08/31/18 14:26	09/01/18 07:48	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/31/18 14:26	09/01/18 07:48	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 07:48	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 07:48	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 07:48	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 14:26	09/01/18 07:48	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 07:48	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 14:26	09/01/18 07:48	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 14:26	09/01/18 07:48	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 14:26	09/01/18 07:48	1
4-Nitrophenol	0.69	U *	20	0.69	ug/L		08/31/18 14:26	09/01/18 07:48	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 14:26	09/01/18 07:48	1

Client Sample ID: RW12 (55-65)-082918
Date Collected: 08/29/18 08:50
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 14:26	09/01/18 07:48	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 14:26	09/01/18 07:48	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 14:26	09/01/18 07:48	1
Isophorone	**1.2**	**J**	10	0.80	ug/L		08/31/18 14:26	09/01/18 07:48	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 07:48	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 14:26	09/01/18 07:48	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		08/31/18 14:26	09/01/18 07:48	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 07:48	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 14:26	09/01/18 07:48	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 07:48	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 14:26	09/01/18 07:48	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 14:26	09/01/18 07:48	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 14:26	09/01/18 07:48	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 14:26	09/01/18 07:48	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 14:26	09/01/18 07:48	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 07:48	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 14:26	09/01/18 07:48	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 14:26	09/01/18 07:48	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 14:26	09/01/18 07:48	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 14:26	09/01/18 07:48	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 14:26	09/01/18 07:48	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 14:26	09/01/18 07:48	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 14:26	09/01/18 07:48	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 07:48	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 14:26	09/01/18 07:48	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 07:48	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 14:26	09/01/18 07:48	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 07:48	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 14:26	09/01/18 07:48	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 14:26	09/01/18 07:48	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 14:26	09/01/18 07:48	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 14:26	09/01/18 07:48	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 14:26	09/01/18 07:48	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 14:26	09/01/18 07:48	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 14:26	09/01/18 07:48	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 07:48	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 07:48	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 14:26	09/01/18 07:48	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 14:26	09/01/18 07:48	1
Caprolactam	0.68	U *	10	0.68	ug/L		08/31/18 14:26	09/01/18 07:48	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/31/18 14:26	09/01/18 07:48	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/31/18 14:26	09/01/18 07:48	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 14:26	09/01/18 07:48	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	09/01/18 07:48	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 14:26	09/01/18 07:48	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 14:26	09/01/18 07:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*9.0*	*J*	*ug/L*		*4.20*		*08/31/18 14:26*	*09/01/18 07:48*	*1*
Ethanol, 2-(2-butoxyethoxy)-	*42*	*J N*	*ug/L*		*5.29*	*112-34-5*	*08/31/18 14:26*	*09/01/18 07:48*	*1*

Client Sample ID: RW12 (55-65)-082918
Date Collected: 08/29/18 08:50
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-7
Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	6.7	J	ug/L		7.60		08/31/18 14:26	09/01/18 07:48	1
Unknown	7.9	J	ug/L		7.89		08/31/18 14:26	09/01/18 07:48	1
Unknown	9.2	J	ug/L		8.03		08/31/18 14:26	09/01/18 07:48	1
Unknown	14	J	ug/L		8.19		08/31/18 14:26	09/01/18 07:48	1
Unknown	7.9	J	ug/L		8.28		08/31/18 14:26	09/01/18 07:48	1
Benzenesulfonamide, N-butyl-	14	J N	ug/L		8.37	3622-84-2	08/31/18 14:26	09/01/18 07:48	1
Unknown	34	J	ug/L		8.66		08/31/18 14:26	09/01/18 07:48	1
Unknown	13	J	ug/L		8.82		08/31/18 14:26	09/01/18 07:48	1
Unknown	7.5	J	ug/L		9.78		08/31/18 14:26	09/01/18 07:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	97		30 - 130	08/31/18 14:26	09/01/18 07:48	1
Phenol-d5 (Surr)	32		15 - 110	08/31/18 14:26	09/01/18 07:48	1
Terphenyl-d14 (Surr)	99		30 - 130	08/31/18 14:26	09/01/18 07:48	1
2,4,6-Tribromophenol (Surr)	92		15 - 110	08/31/18 14:26	09/01/18 07:48	1
2-Fluorophenol (Surr)	49		15 - 110	08/31/18 14:26	09/01/18 07:48	1
2-Fluorobiphenyl	94		30 - 130	08/31/18 14:26	09/01/18 07:48	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:59	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:59	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:59	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:59	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:59	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 21:59	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:59	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:59	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:59	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 21:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		30 - 150	08/31/18 09:38	09/01/18 21:59	1
Tetrachloro-m-xylene	71		30 - 150	08/31/18 09:38	09/01/18 21:59	1
DCB Decachlorobiphenyl	54		30 - 150	08/31/18 09:38	09/01/18 21:59	1
DCB Decachlorobiphenyl	55		30 - 150	08/31/18 09:38	09/01/18 21:59	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**43.6**	**D**	2.28	1.48	mg/L			08/31/18 12:32	19
Sulfate	**266**	**D**	11.4	6.31	mg/L			08/31/18 12:32	19

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 04:04	2
Arsenic	**14.8**		2.0	0.77	ug/L		09/05/18 08:58	09/06/18 04:04	2
Barium	**21.6**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 04:04	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 04:04	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 04:04	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:04	2

Client Sample ID: RW12 (55-65)-082918
Date Collected: 08/29/18 08:50
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-7
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:04	2
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 04:04	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 08:58	09/06/18 04:04	2
Nickel	**2.3**	**J**	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:04	2
Lead	**0.57**	**J**	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 04:04	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 04:04	2
Selenium	**3.1**	**J**	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 04:04	2
Vanadium	**2.3**	**J**	4.0	1.2	ug/L		09/05/18 08:58	09/06/18 04:04	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:58	09/06/18 04:04	2
Aluminum	**173**		40.0	15.0	ug/L		09/05/18 08:58	09/06/18 04:04	2
Sodium	**152000**		200	75.7	ug/L		09/05/18 08:58	09/06/18 04:04	2
Magnesium	**412**		200	65.7	ug/L		09/05/18 08:58	09/06/18 04:04	2
Potassium	**15300**		200	64.9	ug/L		09/05/18 08:58	09/06/18 04:04	2
Calcium	**52900**		200	67.6	ug/L		09/05/18 08:58	09/06/18 04:04	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 08:58	09/06/18 04:04	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 04:04	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/10/18 16:34	09/10/18 17:58	2
Arsenic	**16.0**		2.0	0.77	ug/L		09/10/18 16:34	09/10/18 17:58	2
Barium	**20.6**		4.0	1.1	ug/L		09/10/18 16:34	09/10/18 17:58	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/10/18 16:34	09/10/18 17:58	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/10/18 16:34	09/10/18 17:58	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:58	2
Chromium	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:58	2
Copper	1.9	U	4.0	1.9	ug/L		09/10/18 16:34	09/10/18 17:58	2
Manganese	2.7	U	8.0	2.7	ug/L		09/10/18 16:34	09/10/18 17:58	2
Nickel	**1.5**	**J**	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:58	2
Lead	0.37	U	1.2	0.37	ug/L		09/10/18 16:34	09/10/18 17:58	2
Antimony	0.62	U	2.0	0.62	ug/L		09/10/18 16:34	09/10/18 17:58	2
Selenium	**4.7**	**J**	10.0	0.69	ug/L		09/10/18 16:34	09/10/18 17:58	2
Vanadium	**1.8**	**J**	4.0	1.2	ug/L		09/10/18 16:34	09/10/18 17:58	2
Zinc	5.4	U	16.0	5.4	ug/L		09/10/18 16:34	09/10/18 17:58	2
Aluminum	**152**		40.0	15.0	ug/L		09/10/18 16:34	09/10/18 17:58	2
Sodium	**128000**		200	75.7	ug/L		09/10/18 16:34	09/10/18 17:58	2
Magnesium	**893**		200	65.7	ug/L		09/10/18 16:34	09/10/18 17:58	2
Potassium	**14100**		200	64.9	ug/L		09/10/18 16:34	09/10/18 17:58	2
Calcium	**51100**		200	67.6	ug/L		09/10/18 16:34	09/10/18 17:58	2
Iron	45.7	U	120	45.7	ug/L		09/10/18 16:34	09/10/18 17:58	2
Thallium	0.24	U	0.80	0.24	ug/L		09/10/18 16:34	09/10/18 17:58	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 04:33	09/05/18 09:29	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 05:37	09/05/18 10:55	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Client Sample ID: RW12 (55-65)-082918

Lab Sample ID: 460-163526-7

Date Collected: 08/29/18 08:50
Matrix: Water
Date Received: 08/29/18 14:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 12:59	1
Bicarbonate Alkalinity as CaCO3	**15.5**		5.0	5.0	mg/L			08/31/18 09:21	1
Alkalinity	**77.7**		5.0	5.0	mg/L			08/31/18 09:21	1

Client Sample ID: RW12 (130-140)-082918

Lab Sample ID: 460-163526-8

Date Collected: 08/29/18 09:40
Matrix: Water
Date Received: 08/29/18 14:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 18:39	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 18:39	1
1,2,3-Trichloropropane	**0.0033**	**J**	0.030	0.0030	ug/L			09/02/18 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*70*		*70 - 130*		*09/02/18 18:39*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 21:41	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 21:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 21:41	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 21:41	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 21:41	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 21:41	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 21:41	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 21:41	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 21:41	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 21:41	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 21:41	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 21:41	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 21:41	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 21:41	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 21:41	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 21:41	1
Acetone	5.0	U	5.0	5.0	ug/L			09/01/18 21:41	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 21:41	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 21:41	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 21:41	1
Carbon disulfide	**2.8**		1.0	0.16	ug/L			09/01/18 21:41	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 21:41	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 21:41	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 21:41	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 21:41	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 21:41	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 21:41	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 21:41	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 21:41	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 21:41	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 21:41	1

Client Sample ID: RW12 (130-140)-082918
Date Collected: 08/29/18 09:40
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 21:41	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 21:41	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 21:41	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 21:41	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 21:41	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 21:41	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 21:41	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 21:41	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 21:41	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 21:41	1
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 21:41	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 21:41	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 21:41	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 21:41	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 21:41	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 21:41	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 21:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/18 21:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*09/01/18 21:41*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/01/18 21:41*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*09/01/18 21:41*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/01/18 21:41*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/31/18 09:08	08/31/18 18:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*10 - 150*	*08/31/18 09:08*	*08/31/18 18:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 14:35	09/02/18 08:34	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 14:35	09/02/18 08:34	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 14:35	09/02/18 08:34	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 14:35	09/02/18 08:34	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/31/18 14:35	09/02/18 08:34	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/31/18 14:35	09/02/18 08:34	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/31/18 14:35	09/02/18 08:34	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 14:35	09/02/18 08:34	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		08/31/18 14:35	09/02/18 08:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**0.75**	**J**	10	0.29	ug/L		08/31/18 14:35	09/01/18 07:03	1
2-Chlorophenol	0.38	U *	10	0.38	ug/L		08/31/18 14:35	09/01/18 07:03	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		08/31/18 14:35	09/01/18 07:03	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Client Sample ID: RW12 (130-140)-082918
Date Collected: 08/29/18 09:40
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:35	09/01/18 07:03	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 14:35	09/01/18 07:03	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:35	09/01/18 07:03	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 14:35	09/01/18 07:03	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 14:35	09/01/18 07:03	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 14:35	09/01/18 07:03	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 14:35	09/01/18 07:03	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 14:35	09/01/18 07:03	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/31/18 14:35	09/01/18 07:03	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 14:35	09/01/18 07:03	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 14:35	09/01/18 07:03	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 14:35	09/01/18 07:03	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 14:35	09/01/18 07:03	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 14:35	09/01/18 07:03	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:35	09/01/18 07:03	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 14:35	09/01/18 07:03	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/31/18 14:35	09/01/18 07:03	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:35	09/01/18 07:03	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 14:35	09/01/18 07:03	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 14:35	09/01/18 07:03	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 14:35	09/01/18 07:03	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 14:35	09/01/18 07:03	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 14:35	09/01/18 07:03	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 14:35	09/01/18 07:03	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 14:35	09/01/18 07:03	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 14:35	09/01/18 07:03	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 14:35	09/01/18 07:03	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 14:35	09/01/18 07:03	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 14:35	09/01/18 07:03	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 14:35	09/01/18 07:03	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 14:35	09/01/18 07:03	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 14:35	09/01/18 07:03	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 14:35	09/01/18 07:03	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 14:35	09/01/18 07:03	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 14:35	09/01/18 07:03	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 14:35	09/01/18 07:03	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 14:35	09/01/18 07:03	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 14:35	09/01/18 07:03	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 14:35	09/01/18 07:03	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 14:35	09/01/18 07:03	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 14:35	09/01/18 07:03	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 14:35	09/01/18 07:03	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 14:35	09/01/18 07:03	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 14:35	09/01/18 07:03	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 14:35	09/01/18 07:03	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 14:35	09/01/18 07:03	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 14:35	09/01/18 07:03	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 14:35	09/01/18 07:03	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 14:35	09/01/18 07:03	1

Client Sample ID: RW12 (130-140)-082918
Date Collected: 08/29/18 09:40
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	0.68	U	10	0.68	ug/L		08/31/18 14:35	09/01/18 07:03	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/31/18 14:35	09/01/18 07:03	1
2,2'-oxybis[1-chloropropane]	0.63	U *	10	0.63	ug/L		08/31/18 14:35	09/01/18 07:03	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 14:35	09/01/18 07:03	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 14:35	09/01/18 07:03	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 14:35	09/01/18 07:03	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 14:35	09/01/18 07:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*7.2*	*J*	*ug/L*		*9.03*		*08/31/18 14:35*	*09/01/18 07:03*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*91*		*30 - 130*	*08/31/18 14:35*	*09/01/18 07:03*	*1*
Phenol-d5 (Surr)	*27*		*15 - 110*	*08/31/18 14:35*	*09/01/18 07:03*	*1*
Terphenyl-d14 (Surr)	*92*		*30 - 130*	*08/31/18 14:35*	*09/01/18 07:03*	*1*
2,4,6-Tribromophenol (Surr)	*107*		*15 - 110*	*08/31/18 14:35*	*09/01/18 07:03*	*1*
2-Fluorophenol (Surr)	*45*		*15 - 110*	*08/31/18 14:35*	*09/01/18 07:03*	*1*
2-Fluorobiphenyl	*97*		*30 - 130*	*08/31/18 14:35*	*09/01/18 07:03*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 22:15	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 22:15	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 22:15	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 22:15	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 22:15	1
PCB-1248	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 22:15	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 22:15	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 22:15	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 22:15	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*49*		*30 - 150*	*08/31/18 09:38*	*09/01/18 22:15*	*1*
Tetrachloro-m-xylene	*49*		*30 - 150*	*08/31/18 09:38*	*09/01/18 22:15*	*1*
DCB Decachlorobiphenyl	*49*		*30 - 150*	*08/31/18 09:38*	*09/01/18 22:15*	*1*
DCB Decachlorobiphenyl	*51*		*30 - 150*	*08/31/18 09:38*	*09/01/18 22:15*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.56**		0.12	0.078	mg/L			08/31/18 02:04	1
Sulfate	**25.5**		0.60	0.33	mg/L			08/31/18 02:04	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/06/18 04:07	2
Arsenic	**5.6**		2.0	0.77	ug/L		09/05/18 08:58	09/06/18 04:07	2
Barium	**11.9**		4.0	1.1	ug/L		09/05/18 08:58	09/06/18 04:07	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/06/18 04:07	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/06/18 04:07	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:07	2

Client Sample ID: RW12 (130-140)-082918
Date Collected: 08/29/18 09:40
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-8
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:07	2
Copper	**3.5**	**J**	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 04:07	2
Manganese	**12.2**		8.0	2.7	ug/L		09/05/18 08:58	09/06/18 04:07	2
Nickel	**31.6**		4.0	1.3	ug/L		09/05/18 08:58	09/06/18 04:07	2
Lead	**0.93**	**J**	1.2	0.37	ug/L		09/05/18 08:58	09/06/18 04:07	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/06/18 04:07	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/06/18 04:07	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:58	09/06/18 04:07	2
Zinc	**29.5**		16.0	5.4	ug/L		09/05/18 08:58	09/06/18 04:07	2
Aluminum	**413**		40.0	15.0	ug/L		09/05/18 08:58	09/06/18 04:07	2
Sodium	**29700**		200	75.7	ug/L		09/05/18 08:58	09/06/18 04:07	2
Magnesium	**492**		200	65.7	ug/L		09/05/18 08:58	09/06/18 04:07	2
Potassium	**10100**		200	64.9	ug/L		09/05/18 08:58	09/06/18 04:07	2
Calcium	**23500**		200	67.6	ug/L		09/05/18 08:58	09/06/18 04:07	2
Iron	**475**		120	45.7	ug/L		09/05/18 08:58	09/06/18 04:07	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/06/18 04:07	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/10/18 16:34	09/10/18 18:03	2
Arsenic	**5.7**		2.0	0.77	ug/L		09/10/18 16:34	09/10/18 18:03	2
Barium	**6.4**		4.0	1.1	ug/L		09/10/18 16:34	09/10/18 18:03	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/10/18 16:34	09/10/18 18:03	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/10/18 16:34	09/10/18 18:03	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 18:03	2
Chromium	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 18:03	2
Copper	1.9	U	4.0	1.9	ug/L		09/10/18 16:34	09/10/18 18:03	2
Manganese	2.7	U	8.0	2.7	ug/L		09/10/18 16:34	09/10/18 18:03	2
Nickel	**7.8**		4.0	1.3	ug/L		09/10/18 16:34	09/10/18 18:03	2
Lead	0.37	U	1.2	0.37	ug/L		09/10/18 16:34	09/10/18 18:03	2
Antimony	0.62	U	2.0	0.62	ug/L		09/10/18 16:34	09/10/18 18:03	2
Selenium	**1.3**	**J**	10.0	0.69	ug/L		09/10/18 16:34	09/10/18 18:03	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/10/18 16:34	09/10/18 18:03	2
Zinc	5.4	U	16.0	5.4	ug/L		09/10/18 16:34	09/10/18 18:03	2
Aluminum	**124**		40.0	15.0	ug/L		09/10/18 16:34	09/10/18 18:03	2
Sodium	**27400**		200	75.7	ug/L		09/10/18 16:34	09/10/18 18:03	2
Magnesium	**99.3**	**J**	200	65.7	ug/L		09/10/18 16:34	09/10/18 18:03	2
Potassium	**9570**		200	64.9	ug/L		09/10/18 16:34	09/10/18 18:03	2
Calcium	**21000**		200	67.6	ug/L		09/10/18 16:34	09/10/18 18:03	2
Iron	45.7	U	120	45.7	ug/L		09/10/18 16:34	09/10/18 18:03	2
Thallium	0.24	U	0.80	0.24	ug/L		09/10/18 16:34	09/10/18 18:03	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 04:33	09/05/18 09:31	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 05:37	09/05/18 10:57	1

Client Sample ID: RW12 (130-140)-082918

Lab Sample ID: 460-163526-8

Date Collected: 08/29/18 09:40

Matrix: Water

Date Received: 08/29/18 14:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:03	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/31/18 09:30	1
Alkalinity	**99.9**		5.0	5.0	mg/L			08/31/18 09:30	1

Client Sample ID: TB-04-082918

Lab Sample ID: 460-163526-9

Date Collected: 08/29/18 00:00

Matrix: Water

Date Received: 08/29/18 14:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 12:20	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 12:20	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 12:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*70 - 130*		*09/02/18 12:20*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 19:21	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 19:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 19:21	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 19:21	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 19:21	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 19:21	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 19:21	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 19:21	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 19:21	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 19:21	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 19:21	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 19:21	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 19:21	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 19:21	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 19:21	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 19:21	1
Acetone	5.0	U	5.0	5.0	ug/L			09/01/18 19:21	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 19:21	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 19:21	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 19:21	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/01/18 19:21	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 19:21	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 19:21	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 19:21	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 19:21	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 19:21	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 19:21	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 19:21	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 19:21	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 19:21	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 19:21	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Client Sample ID: TB-04-082918
Date Collected: 08/29/18 00:00
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 19:21	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 19:21	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 19:21	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 19:21	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 19:21	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 19:21	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 19:21	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 19:21	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 19:21	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 19:21	1
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 19:21	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 19:21	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 19:21	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 19:21	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 19:21	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 19:21	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 19:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/01/18 19:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*09/01/18 19:21*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/01/18 19:21*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*09/01/18 19:21*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*09/01/18 19:21*	*1*

Surrogate Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
460-163526-1	RW2 (279-289)-082818	116	94	106	97
460-163526-2	RW2 (252-262)-082818	116	95	110	98
460-163526-3	RW10A (51-61)-082818	116	96	106	98
460-163526-4	RW10A (75-85)-082818	116	95	107	97
460-163526-5	RW10 (120-130)-082818	114	93	109	99
460-163526-6	RW10 (185-195)-082818	112	97	106	97
460-163526-7	RW12 (55-65)-082918	112	96	106	98
460-163526-8	RW12 (130-140)-082918	117	95	111	98
460-163526-9	TB-04-082918	114	95	105	96
LCS 460-549219/4	Lab Control Sample	106	98	101	98
LCS 460-549428/4	Lab Control Sample	108	102	104	97
LCSD 460-549219/5	Lab Control Sample Dup	111	99	103	99
LCSD 460-549428/5	Lab Control Sample Dup	108	98	103	97
MB 460-549219/8	Method Blank	113	94	106	98
MB 460-549428/8	Method Blank	112	95	108	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(70-130)
460-163526-1	RW2 (279-289)-082818	82
460-163526-2	RW2 (252-262)-082818	79
460-163526-3	RW10A (51-61)-082818	73
460-163526-4	RW10A (75-85)-082818	75
460-163526-5	RW10 (120-130)-082818	78
460-163526-6	RW10 (185-195)-082818	79
460-163526-7	RW12 (55-65)-082918	81
460-163526-8	RW12 (130-140)-082918	70
460-163526-9	TB-04-082918	77
LCS 460-549351/4	Lab Control Sample	80
LCSD 460-549351/5	Lab Control Sample Dup	83
MB 460-549351/9	Method Blank	85

Surrogate Legend

BFB = 4-Bromofluorobenzene

Surrogate Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	PHL	TPHL	TBP	2FP	FBP
Lab Sample ID	Client Sample ID	(30-130)	(15-110)	(30-130)	(15-110)	(15-110)	(30-130)
460-163526-1	RW2 (279-289)-082818	93	30	88	93	47	88
460-163526-2	RW2 (252-262)-082818	94	30	95	91	46	90
460-163526-3	RW10A (51-61)-082818	86	30	90	81	45	81
460-163526-4	RW10A (75-85)-082818	86	26	90	77	41	82
460-163526-5	RW10 (120-130)-082818	89	30	92	86	46	84
460-163526-6	RW10 (185-195)-082818	88	27	91	80	43	85
460-163526-7	RW12 (55-65)-082918	97	32	99	92	49	94
460-163526-8	RW12 (130-140)-082918	91	27	92	107	45	97
460-163528-E-1-A MS	Matrix Spike	80	25	75	93	41	86
460-163528-E-1-B MSD	Matrix Spike Duplicate	83	26	75	98	43	86
LCS 460-548982/2-A	Lab Control Sample	78	26	83	84	40	73
LCS 460-548982/4-A	Lab Control Sample	92	28	92	84	45	83
LCS 460-548983/2-A	Lab Control Sample	78	25	83	93	40	81
LCS 460-548983/3-A	Lab Control Sample	91	27	87	95	45	92
LCSD 460-548982/3-A	Lab Control Sample Dup	93	32	92	90	48	86
LCSD 460-548982/5-A	Lab Control Sample Dup	88	27	92	80	42	80
MB 460-548982/1-A	Method Blank	86	28	89	77	44	79
MB 460-548983/1-A	Method Blank	84	27	83	86	43	86

Surrogate Legend

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

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCBP1	DCBP2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
460-163526-1	RW2 (279-289)-082818	73	73	77	73
460-163526-2	RW2 (252-262)-082818	69	70	95	92
460-163526-3	RW10A (51-61)-082818	65	65	66	63
460-163526-4	RW10A (75-85)-082818	48	47	74	70
460-163526-5	RW10 (120-130)-082818	59	62	90	94
460-163526-6	RW10 (185-195)-082818	69	70	90	90
460-163526-7	RW12 (55-65)-082918	71	71	54	55
460-163526-8	RW12 (130-140)-082918	49	49	49	51
LCS 460-548909/2-A	Lab Control Sample	79	82	92	90
LCSD 460-548909/3-A	Lab Control Sample Dup	80	80	99	94
MB 460-548909/1-A	Method Blank	80	78	98	90

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Isotope Dilution Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DXE (10-150)
460-163445-I-1-A MS	Matrix Spike	33
460-163445-I-1-B MSD	Matrix Spike Duplicate	35
460-163526-1	RW2 (279-289)-082818	37
460-163526-2	RW2 (252-262)-082818	41
460-163526-3	RW10A (51-61)-082818	36
460-163526-4	RW10A (75-85)-082818	39
460-163526-5	RW10 (120-130)-082818	40
460-163526-6	RW10 (185-195)-082818	38
460-163526-7	RW12 (55-65)-082918	42
460-163526-8	RW12 (130-140)-082918	35
MB 460-548897/1-A	Method Blank	32

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DXE (10-200)
LCS 460-548897/2-A	Lab Control Sample	33
LCSD 460-548897/3-A	Lab Control Sample Dup	33

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-549219/8
Matrix: Water
Analysis Batch: 549219

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 18:12	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 18:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 18:12	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 18:12	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 18:12	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 18:12	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 18:12	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 18:12	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 18:12	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 18:12	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 18:12	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 18:12	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 18:12	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 18:12	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 18:12	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 18:12	1
Acetone	5.0	U	5.0	5.0	ug/L			09/01/18 18:12	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 18:12	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 18:12	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 18:12	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/01/18 18:12	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 18:12	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 18:12	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 18:12	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 18:12	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 18:12	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 18:12	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 18:12	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 18:12	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 18:12	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 18:12	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 18:12	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 18:12	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 18:12	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 18:12	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 18:12	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 18:12	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 18:12	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 18:12	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 18:12	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 18:12	1
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 18:12	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 18:12	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 18:12	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 18:12	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 18:12	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 18:12	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 18:12	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					09/01/18 18:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 130		09/01/18 18:12	1
4-Bromofluorobenzene	94		70 - 130		09/01/18 18:12	1
Dibromofluoromethane (Surr)	106		70 - 130		09/01/18 18:12	1
Toluene-d8 (Surr)	98		70 - 130		09/01/18 18:12	1

Lab Sample ID: LCS 460-549219/4
Matrix: Water
Analysis Batch: 549219

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	21.7		ug/L		109	70 - 130
1,1,2,2-Tetrachloroethane	20.0	22.8		ug/L		114	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.4		ug/L		92	70 - 130
1,1,2-Trichloroethane	20.0	20.1		ug/L		100	70 - 130
1,1-Dichloroethane	20.0	21.1		ug/L		106	70 - 130
1,1-Dichloroethene	20.0	20.6		ug/L		103	70 - 130
1,2,3-Trichlorobenzene	20.0	21.8		ug/L		109	70 - 130
1,2,4-Trichlorobenzene	20.0	22.1		ug/L		111	70 - 130
1,2-Dichlorobenzene	20.0	21.7		ug/L		108	70 - 130
1,2-Dichloroethane	20.0	20.9		ug/L		105	70 - 130
1,2-Dichloropropane	20.0	20.3		ug/L		101	70 - 130
1,3-Dichlorobenzene	20.0	21.3		ug/L		106	70 - 130
1,4-Dichlorobenzene	20.0	21.7		ug/L		109	70 - 130
2-Butanone (MEK)	100	101		ug/L		101	40 - 160
2-Hexanone	100	104		ug/L		104	40 - 160
4-Methyl-2-pentanone (MIBK)	100	112		ug/L		112	40 - 160
Acetone	100	107		ug/L		107	40 - 160
Benzene	20.0	20.8		ug/L		104	70 - 130
Bromoform	20.0	21.3		ug/L		107	70 - 130
Bromomethane	20.0	19.9		ug/L		99	40 - 160
Carbon disulfide	20.0	19.8		ug/L		99	40 - 160
Carbon tetrachloride	20.0	22.3		ug/L		112	70 - 130
Chlorobenzene	20.0	19.6		ug/L		98	70 - 130
Chlorobromomethane	20.0	20.9		ug/L		105	70 - 130
Chlorodibromomethane	20.0	21.2		ug/L		106	70 - 130
Chloroethane	20.0	20.7		ug/L		103	40 - 160
Chloroform	20.0	21.5		ug/L		107	70 - 130
Chloromethane	20.0	20.8		ug/L		104	40 - 160
cis-1,2-Dichloroethene	20.0	21.0		ug/L		105	70 - 130
cis-1,3-Dichloropropene	20.0	19.8		ug/L		99	70 - 130
Cyclohexane	20.0	19.5		ug/L		98	70 - 130
Dichlorobromomethane	20.0	22.0		ug/L		110	70 - 130
Dichlorodifluoromethane	20.0	16.3		ug/L		81	40 - 160
Ethylbenzene	20.0	20.5		ug/L		103	70 - 130
Isopropylbenzene	20.0	22.2		ug/L		111	70 - 130
Methyl acetate	40.0	40.8		ug/L		102	70 - 130
Methyl tert-butyl ether	20.0	20.9		ug/L		104	70 - 130
Methylcyclohexane	20.0	19.6		ug/L		98	70 - 130
Methylene Chloride	20.0	20.9		ug/L		105	70 - 130

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

Lab Sample ID: LCS 460-549219/4
Matrix: Water
Analysis Batch: 549219

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	20.0	20.6		ug/L		103	70 - 130
Tetrachloroethene	20.0	19.0		ug/L		95	70 - 130
Toluene	20.0	20.5		ug/L		103	70 - 130
trans-1,2-Dichloroethene	20.0	20.7		ug/L		104	70 - 130
trans-1,3-Dichloropropene	20.0	19.0		ug/L		95	70 - 130
Trichloroethene	20.0	19.7		ug/L		99	70 - 130
Trichlorofluoromethane	20.0	20.7		ug/L		104	40 - 160
Vinyl chloride	20.0	20.3		ug/L		102	70 - 130
Xylenes, Total	40.0	41.2		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
4-Bromofluorobenzene	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 460-549219/5
Matrix: Water
Analysis Batch: 549219

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	20.1		ug/L		101	70 - 130	8	20
1,1,2,2-Tetrachloroethane	20.0	23.2		ug/L		116	70 - 130	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	15.9		ug/L		79	70 - 130	14	20
1,1,2-Trichloroethane	20.0	19.4		ug/L		97	70 - 130	3	20
1,1-Dichloroethane	20.0	19.9		ug/L		99	70 - 130	6	20
1,1-Dichloroethene	20.0	18.6		ug/L		93	70 - 130	11	20
1,2,3-Trichlorobenzene	20.0	20.9		ug/L		105	70 - 130	4	20
1,2,4-Trichlorobenzene	20.0	20.5		ug/L		102	70 - 130	8	20
1,2-Dichlorobenzene	20.0	20.4		ug/L		102	70 - 130	6	20
1,2-Dichloroethane	20.0	19.9		ug/L		100	70 - 130	5	20
1,2-Dichloropropane	20.0	19.0		ug/L		95	70 - 130	6	20
1,3-Dichlorobenzene	20.0	20.7		ug/L		103	70 - 130	3	20
1,4-Dichlorobenzene	20.0	20.6		ug/L		103	70 - 130	5	20
2-Butanone (MEK)	100	85.4		ug/L		85	40 - 160	17	20
2-Hexanone	100	95.8		ug/L		96	40 - 160	8	20
4-Methyl-2-pentanone (MIBK)	100	105		ug/L		105	40 - 160	6	20
Acetone	100	102		ug/L		102	40 - 160	5	20
Benzene	20.0	19.9		ug/L		99	70 - 130	5	20
Bromoform	20.0	20.2		ug/L		101	70 - 130	6	20
Bromomethane	20.0	18.7		ug/L		94	40 - 160	6	20
Carbon disulfide	20.0	17.4		ug/L		87	40 - 160	13	20
Carbon tetrachloride	20.0	20.5		ug/L		102	70 - 130	8	20
Chlorobenzene	20.0	18.8		ug/L		94	70 - 130	4	20
Chlorobromomethane	20.0	20.0		ug/L		100	70 - 130	4	20
Chlorodibromomethane	20.0	20.5		ug/L		103	70 - 130	3	20
Chloroethane	20.0	18.8		ug/L		94	40 - 160	10	20

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

Lab Sample ID: LCSD 460-549219/5
Matrix: Water
Analysis Batch: 549219

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroform			20.0	20.1		ug/L		100	70 - 130	7	20
Chloromethane			20.0	18.1		ug/L		91	40 - 160	13	20
cis-1,2-Dichloroethene			20.0	19.9		ug/L		99	70 - 130	6	20
cis-1,3-Dichloropropene			20.0	18.8		ug/L		94	70 - 130	5	20
Cyclohexane			20.0	17.2		ug/L		86	70 - 130	12	20
Dichlorobromomethane			20.0	20.7		ug/L		104	70 - 130	6	20
Dichlorodifluoromethane			20.0	14.3		ug/L		72	40 - 160	13	20
Ethylbenzene			20.0	19.4		ug/L		97	70 - 130	6	20
Isopropylbenzene			20.0	20.6		ug/L		103	70 - 130	8	20
Methyl acetate			40.0	41.0		ug/L		103	70 - 130	1	20
Methyl tert-butyl ether			20.0	20.7		ug/L		104	70 - 130	1	20
Methylcyclohexane			20.0	17.5		ug/L		88	70 - 130	11	20
Methylene Chloride			20.0	19.8		ug/L		99	70 - 130	6	20
Styrene			20.0	20.5		ug/L		102	70 - 130	1	20
Tetrachloroethene			20.0	17.8		ug/L		89	70 - 130	6	20
Toluene			20.0	19.5		ug/L		97	70 - 130	5	20
trans-1,2-Dichloroethene			20.0	19.1		ug/L		96	70 - 130	8	20
trans-1,3-Dichloropropene			20.0	18.6		ug/L		93	70 - 130	2	20
Trichloroethene			20.0	18.2		ug/L		91	70 - 130	8	20
Trichlorofluoromethane			20.0	18.0		ug/L		90	40 - 160	14	20
Vinyl chloride			20.0	17.7		ug/L		89	70 - 130	14	20
Xylenes, Total			40.0	39.4		ug/L		98	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*
4-Bromofluorobenzene	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 460-549428/8
Matrix: Water
Analysis Batch: 549428

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/03/18 00:23	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/03/18 00:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/03/18 00:23	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 00:23	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/03/18 00:23	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/03/18 00:23	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/03/18 00:23	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/03/18 00:23	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/03/18 00:23	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 00:23	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/03/18 00:23	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/03/18 00:23	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/03/18 00:23	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/03/18 00:23	1

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

Lab Sample ID: MB 460-549428/8
Matrix: Water
Analysis Batch: 549428

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/03/18 00:23	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/03/18 00:23	1
Acetone	5.0	U	5.0	5.0	ug/L			09/03/18 00:23	1
Benzene	0.43	U	1.0	0.43	ug/L			09/03/18 00:23	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/03/18 00:23	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/03/18 00:23	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/03/18 00:23	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/03/18 00:23	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/03/18 00:23	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/03/18 00:23	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/03/18 00:23	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/03/18 00:23	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/03/18 00:23	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/03/18 00:23	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/03/18 00:23	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/03/18 00:23	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/03/18 00:23	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/03/18 00:23	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/03/18 00:23	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/03/18 00:23	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/03/18 00:23	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/03/18 00:23	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/03/18 00:23	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/03/18 00:23	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/03/18 00:23	1
Styrene	0.42	U	1.0	0.42	ug/L			09/03/18 00:23	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/03/18 00:23	1
Toluene	0.38	U	1.0	0.38	ug/L			09/03/18 00:23	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/03/18 00:23	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/03/18 00:23	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/03/18 00:23	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/03/18 00:23	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/03/18 00:23	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/03/18 00:23	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/03/18 00:23*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*09/03/18 00:23*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/03/18 00:23*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*09/03/18 00:23*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*09/03/18 00:23*	*1*

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

Lab Sample ID: LCS 460-549428/4
Matrix: Water
Analysis Batch: 549428

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.0		ug/L		100	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.3		ug/L		106	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	17.8		ug/L		89	70 - 130
1,1,2-Trichloroethane	20.0	18.4		ug/L		92	70 - 130
1,1-Dichloroethane	20.0	19.1		ug/L		96	70 - 130
1,1-Dichloroethene	20.0	18.2		ug/L		91	70 - 130
1,2,3-Trichlorobenzene	20.0	18.5		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	20.0	19.0		ug/L		95	70 - 130
1,2-Dichlorobenzene	20.0	18.9		ug/L		94	70 - 130
1,2-Dichloroethane	20.0	18.7		ug/L		93	70 - 130
1,2-Dichloropropane	20.0	18.2		ug/L		91	70 - 130
1,3-Dichlorobenzene	20.0	18.6		ug/L		93	70 - 130
1,4-Dichlorobenzene	20.0	18.3		ug/L		91	70 - 130
2-Butanone (MEK)	100	82.7		ug/L		83	40 - 160
2-Hexanone	100	87.3		ug/L		87	40 - 160
4-Methyl-2-pentanone (MIBK)	100	94.3		ug/L		94	40 - 160
Acetone	100	92.1		ug/L		92	40 - 160
Benzene	20.0	18.8		ug/L		94	70 - 130
Bromoform	20.0	19.6		ug/L		98	70 - 130
Bromomethane	20.0	21.2		ug/L		106	40 - 160
Carbon disulfide	20.0	17.7		ug/L		89	40 - 160
Carbon tetrachloride	20.0	20.4		ug/L		102	70 - 130
Chlorobenzene	20.0	17.7		ug/L		88	70 - 130
Chlorobromomethane	20.0	18.4		ug/L		92	70 - 130
Chlorodibromomethane	20.0	18.7		ug/L		93	70 - 130
Chloroethane	20.0	20.7		ug/L		103	40 - 160
Chloroform	20.0	19.2		ug/L		96	70 - 130
Chloromethane	20.0	19.3		ug/L		97	40 - 160
cis-1,2-Dichloroethene	20.0	18.8		ug/L		94	70 - 130
cis-1,3-Dichloropropene	20.0	17.4		ug/L		87	70 - 130
Cyclohexane	20.0	18.5		ug/L		93	70 - 130
Dichlorobromomethane	20.0	19.5		ug/L		97	70 - 130
Dichlorodifluoromethane	20.0	16.3		ug/L		82	40 - 160
Ethylbenzene	20.0	18.4		ug/L		92	70 - 130
Isopropylbenzene	20.0	20.0		ug/L		100	70 - 130
Methyl acetate	40.0	37.6		ug/L		94	70 - 130
Methyl tert-butyl ether	20.0	19.3		ug/L		97	70 - 130
Methylcyclohexane	20.0	18.6		ug/L		93	70 - 130
Methylene Chloride	20.0	19.4		ug/L		97	70 - 130
Styrene	20.0	19.4		ug/L		97	70 - 130
Tetrachloroethene	20.0	17.1		ug/L		85	70 - 130
Toluene	20.0	18.6		ug/L		93	70 - 130
trans-1,2-Dichloroethene	20.0	19.1		ug/L		95	70 - 130
trans-1,3-Dichloropropene	20.0	17.9		ug/L		89	70 - 130
Trichloroethene	20.0	17.5		ug/L		87	70 - 130
Trichlorofluoromethane	20.0	19.4		ug/L		97	40 - 160
Vinyl chloride	20.0	19.3		ug/L		96	70 - 130

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

Lab Sample ID: LCS 460-549428/4
Matrix: Water
Analysis Batch: 549428

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Xylenes, Total			40.0	37.2		ug/L		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 460-549428/5
Matrix: Water
Analysis Batch: 549428

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	21.7		ug/L		109	70 - 130	8	20
1,1,2,2-Tetrachloroethane			20.0	21.3		ug/L		107	70 - 130	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane			20.0	18.4		ug/L		92	70 - 130	3	20
1,1,2-Trichloroethane			20.0	19.8		ug/L		99	70 - 130	7	20
1,1-Dichloroethane			20.0	20.2		ug/L		101	70 - 130	5	20
1,1-Dichloroethene			20.0	20.1		ug/L		100	70 - 130	10	20
1,2,3-Trichlorobenzene			20.0	20.0		ug/L		100	70 - 130	7	20
1,2,4-Trichlorobenzene			20.0	19.8		ug/L		99	70 - 130	4	20
1,2-Dichlorobenzene			20.0	19.9		ug/L		99	70 - 130	5	20
1,2-Dichloroethane			20.0	19.4		ug/L		97	70 - 130	4	20
1,2-Dichloropropane			20.0	19.4		ug/L		97	70 - 130	7	20
1,3-Dichlorobenzene			20.0	20.6		ug/L		103	70 - 130	10	20
1,4-Dichlorobenzene			20.0	20.2		ug/L		101	70 - 130	10	20
2-Butanone (MEK)			100	98.5		ug/L		99	40 - 160	18	20
2-Hexanone			100	99.0		ug/L		99	40 - 160	13	20
4-Methyl-2-pentanone (MIBK)			100	105		ug/L		105	40 - 160	10	20
Acetone			100	104		ug/L		104	40 - 160	12	20
Benzene			20.0	20.0		ug/L		100	70 - 130	7	20
Bromoform			20.0	20.2		ug/L		101	70 - 130	3	20
Bromomethane			20.0	20.7		ug/L		103	40 - 160	3	20
Carbon disulfide			20.0	18.9		ug/L		95	40 - 160	6	20
Carbon tetrachloride			20.0	22.1		ug/L		110	70 - 130	8	20
Chlorobenzene			20.0	19.2		ug/L		96	70 - 130	8	20
Chlorobromomethane			20.0	19.3		ug/L		96	70 - 130	5	20
Chlorodibromomethane			20.0	20.0		ug/L		100	70 - 130	7	20
Chloroethane			20.0	22.0		ug/L		110	40 - 160	6	20
Chloroform			20.0	20.7		ug/L		104	70 - 130	8	20
Chloromethane			20.0	20.2		ug/L		101	40 - 160	5	20
cis-1,2-Dichloroethene			20.0	20.4		ug/L		102	70 - 130	8	20
cis-1,3-Dichloropropene			20.0	18.7		ug/L		93	70 - 130	7	20
Cyclohexane			20.0	19.9		ug/L		100	70 - 130	7	20
Dichlorobromomethane			20.0	21.0		ug/L		105	70 - 130	8	20
Dichlorodifluoromethane			20.0	18.3		ug/L		91	40 - 160	11	20
Ethylbenzene			20.0	19.8		ug/L		99	70 - 130	7	20

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

Lab Sample ID: LCSD 460-549428/5
Matrix: Water
Analysis Batch: 549428

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Isopropylbenzene			20.0	20.9		ug/L		105	70 - 130	4	20
Methyl acetate			40.0	39.1		ug/L		98	70 - 130	4	20
Methyl tert-butyl ether			20.0	20.2		ug/L		101	70 - 130	4	20
Methylcyclohexane			20.0	20.4		ug/L		102	70 - 130	9	20
Methylene Chloride			20.0	20.7		ug/L		104	70 - 130	7	20
Styrene			20.0	20.4		ug/L		102	70 - 130	5	20
Tetrachloroethene			20.0	18.6		ug/L		93	70 - 130	8	20
Toluene			20.0	19.8		ug/L		99	70 - 130	6	20
trans-1,2-Dichloroethene			20.0	20.9		ug/L		105	70 - 130	9	20
trans-1,3-Dichloropropene			20.0	18.3		ug/L		91	70 - 130	2	20
Trichloroethene			20.0	19.0		ug/L		95	70 - 130	9	20
Trichlorofluoromethane			20.0	15.7	*	ug/L		78	40 - 160	22	20
Vinyl chloride			20.0	20.3		ug/L		102	70 - 130	5	20
Xylenes, Total			40.0	40.0		ug/L		100	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

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

Lab Sample ID: MB 460-549351/9
Matrix: Water
Analysis Batch: 549351

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/02/18 11:55	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/02/18 11:55	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/02/18 11:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*70 - 130*		*09/02/18 11:55*	*1*

Lab Sample ID: LCS 460-549351/4
Matrix: Water
Analysis Batch: 549351

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane			0.0500	0.0441		ug/L		88	40 - 160
Ethylene Dibromide			0.0500	0.0437		ug/L		87	70 - 130
1,2,3-Trichloropropane			0.0500	0.0525		ug/L		105	40 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*80*		*70 - 130*

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

Lab Sample ID: LCSD 460-549351/5
Matrix: Water
Analysis Batch: 549351

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.0500	0.0521		ug/L		104	40 - 160	16	20
Ethylene Dibromide			0.0500	0.0486		ug/L		97	70 - 130	11	20
1,2,3-Trichloropropane			0.0500	0.0586		ug/L		117	40 - 160	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*83*		*70 - 130*

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

Lab Sample ID: MB 460-548982/1-A
Matrix: Water
Analysis Batch: 549086

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548982

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/31/18 14:26	08/31/18 22:40	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/31/18 14:26	08/31/18 22:40	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/31/18 14:26	08/31/18 22:40	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	08/31/18 22:40	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	08/31/18 22:40	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:26	08/31/18 22:40	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 14:26	08/31/18 22:40	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 14:26	08/31/18 22:40	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 14:26	08/31/18 22:40	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 14:26	08/31/18 22:40	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 14:26	08/31/18 22:40	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/31/18 14:26	08/31/18 22:40	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 14:26	08/31/18 22:40	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		08/31/18 14:26	08/31/18 22:40	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		08/31/18 14:26	08/31/18 22:40	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 14:26	08/31/18 22:40	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 14:26	08/31/18 22:40	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 14:26	08/31/18 22:40	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 14:26	08/31/18 22:40	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	08/31/18 22:40	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 14:26	08/31/18 22:40	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/31/18 14:26	08/31/18 22:40	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:26	08/31/18 22:40	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 14:26	08/31/18 22:40	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 14:26	08/31/18 22:40	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 14:26	08/31/18 22:40	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 14:26	08/31/18 22:40	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 14:26	08/31/18 22:40	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 14:26	08/31/18 22:40	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 14:26	08/31/18 22:40	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 14:26	08/31/18 22:40	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 14:26	08/31/18 22:40	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 14:26	08/31/18 22:40	1

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

Lab Sample ID: MB 460-548982/1-A
Matrix: Water
Analysis Batch: 549086

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548982

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 14:26	08/31/18 22:40	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 14:26	08/31/18 22:40	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 14:26	08/31/18 22:40	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 14:26	08/31/18 22:40	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 14:26	08/31/18 22:40	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 14:26	08/31/18 22:40	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		08/31/18 14:26	08/31/18 22:40	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 14:26	08/31/18 22:40	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 14:26	08/31/18 22:40	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 14:26	08/31/18 22:40	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 14:26	08/31/18 22:40	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 14:26	08/31/18 22:40	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 14:26	08/31/18 22:40	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 14:26	08/31/18 22:40	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		08/31/18 14:26	08/31/18 22:40	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 14:26	08/31/18 22:40	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 14:26	08/31/18 22:40	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 14:26	08/31/18 22:40	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		08/31/18 14:26	08/31/18 22:40	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 14:26	08/31/18 22:40	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		08/31/18 14:26	08/31/18 22:40	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		08/31/18 14:26	08/31/18 22:40	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		08/31/18 14:26	08/31/18 22:40	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 14:26	08/31/18 22:40	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 14:26	08/31/18 22:40	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 14:26	08/31/18 22:40	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 14:26	08/31/18 22:40	1
Caprolactam	0.68	U	10	0.68	ug/L		08/31/18 14:26	08/31/18 22:40	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/31/18 14:26	08/31/18 22:40	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/31/18 14:26	08/31/18 22:40	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 14:26	08/31/18 22:40	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 14:26	08/31/18 22:40	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 14:26	08/31/18 22:40	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 14:26	08/31/18 22:40	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/31/18 14:26*	*08/31/18 22:40*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*86*		*30 - 130*	*08/31/18 14:26*	*08/31/18 22:40*	*1*
Phenol-d5 (Surr)	*28*		*15 - 110*	*08/31/18 14:26*	*08/31/18 22:40*	*1*
Terphenyl-d14 (Surr)	*89*		*30 - 130*	*08/31/18 14:26*	*08/31/18 22:40*	*1*
2,4,6-Tribromophenol (Surr)	*77*		*15 - 110*	*08/31/18 14:26*	*08/31/18 22:40*	*1*
2-Fluorophenol (Surr)	*44*		*15 - 110*	*08/31/18 14:26*	*08/31/18 22:40*	*1*
2-Fluorobiphenyl	*79*		*30 - 130*	*08/31/18 14:26*	*08/31/18 22:40*	*1*

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

Lab Sample ID: LCS 460-548982/2-A
Matrix: Water
Analysis Batch: 549086

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548982

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	80.0	25.6		ug/L		32	20 - 160
2-Chlorophenol	80.0	54.5	*	ug/L		68	70 - 130
2-Methylphenol	80.0	45.2	*	ug/L		56	70 - 130
4-Methylphenol	80.0	37.9		ug/L		47	20 - 160
2-Nitrophenol	80.0	76.5		ug/L		96	70 - 130
2,4-Dimethylphenol	80.0	56.5		ug/L		71	70 - 130
2,4-Dichlorophenol	80.0	60.6		ug/L		76	70 - 130
4-Chloro-3-methylphenol	80.0	54.2		ug/L		68	20 - 160
2,4,6-Trichlorophenol	80.0	66.7		ug/L		83	70 - 130
2,4,5-Trichlorophenol	80.0	65.6		ug/L		82	20 - 160
2,4-Dinitrotoluene	80.0	73.2		ug/L		91	70 - 130
4-Nitrophenol	160	44.6		ug/L		28	20 - 160
4,6-Dinitro-2-methylphenol	160	190		ug/L		118	20 - 160
Pentachlorophenol	160	127		ug/L		80	20 - 160
Bis(2-chloroethyl)ether	80.0	62.2		ug/L		78	70 - 130
N-Nitrosodi-n-propylamine	80.0	59.4		ug/L		74	70 - 130
Hexachloroethane	80.0	57.6		ug/L		72	20 - 160
Nitrobenzene	80.0	66.5		ug/L		83	70 - 130
Isophorone	80.0	63.6		ug/L		80	70 - 130
Naphthalene	80.0	61.3		ug/L		77	70 - 130
4-Chloroaniline	80.0	59.2		ug/L		74	20 - 160
Hexachlorobutadiene	80.0	55.4	*	ug/L		69	70 - 130
2-Methylnaphthalene	80.0	59.7		ug/L		75	70 - 130
Hexachlorocyclopentadiene	80.0	63.6		ug/L		79	20 - 160
2-Chloronaphthalene	80.0	61.9		ug/L		77	70 - 130
2-Nitroaniline	80.0	64.9		ug/L		81	20 - 160
Dimethyl phthalate	80.0	64.2		ug/L		80	70 - 130
Acenaphthylene	80.0	66.3		ug/L		83	70 - 130
2,6-Dinitrotoluene	80.0	72.8		ug/L		91	70 - 130
3-Nitroaniline	80.0	65.0		ug/L		81	20 - 160
Acenaphthene	80.0	60.8		ug/L		76	70 - 130
Dibenzofuran	80.0	61.4		ug/L		77	70 - 130
2,4-Dinitrophenol	160	186		ug/L		116	20 - 160
Diethyl phthalate	80.0	67.5		ug/L		84	70 - 130
4-Chlorophenyl phenyl ether	80.0	62.1		ug/L		78	70 - 130
Fluorene	80.0	61.0		ug/L		76	70 - 130
4-Nitroaniline	80.0	66.7		ug/L		83	20 - 160
N-Nitrosodiphenylamine	80.0	64.9		ug/L		81	70 - 130
4-Bromophenyl phenyl ether	80.0	62.7		ug/L		78	70 - 130
Hexachlorobenzene	80.0	65.1		ug/L		81	70 - 130
Phenanthrene	80.0	64.8		ug/L		81	70 - 130
Anthracene	80.0	65.4		ug/L		82	70 - 130
Carbazole	80.0	67.0		ug/L		84	70 - 130
Di-n-butyl phthalate	80.0	75.1		ug/L		94	70 - 130
Fluoranthene	80.0	67.7		ug/L		85	70 - 130
Pyrene	80.0	75.0		ug/L		94	70 - 130
Butyl benzyl phthalate	80.0	82.6		ug/L		103	70 - 130
Benzo[a]anthracene	80.0	71.6		ug/L		89	70 - 130

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

Lab Sample ID: LCS 460-548982/2-A
Matrix: Water
Analysis Batch: 549086

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548982

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	80.0	71.3		ug/L		89	70 - 130
Bis(2-ethylhexyl) phthalate	80.0	82.1		ug/L		103	70 - 130
Di-n-octyl phthalate	80.0	76.3		ug/L		95	70 - 130
Benzo[b]fluoranthene	80.0	74.8		ug/L		94	70 - 130
Benzo[k]fluoranthene	80.0	73.9		ug/L		92	70 - 130
Benzo[a]pyrene	80.0	73.3		ug/L		92	70 - 130
Indeno[1,2,3-cd]pyrene	80.0	67.1		ug/L		84	70 - 130
Dibenz(a,h)anthracene	80.0	69.2		ug/L		86	70 - 130
Benzo[g,h,i]perylene	80.0	68.2		ug/L		85	70 - 130
1,1'-Biphenyl	80.0	60.8		ug/L		76	70 - 130
Acetophenone	80.0	59.8		ug/L		75	70 - 130
2,2'-oxybis[1-chloropropane]	80.0	60.0		ug/L		75	70 - 130
1,2,4,5-Tetrachlorobenzene	80.0	59.1		ug/L		74	70 - 130
2,3,4,6-Tetrachlorophenol	80.0	70.6		ug/L		88	70 - 130
3,3'-Dichlorobenzidine	80.0	64.7		ug/L		81	70 - 130
Bis(2-chloroethoxy)methane	80.0	63.4		ug/L		79	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*78*		*30 - 130*
Phenol-d5 (Surr)	*26*		*15 - 110*
Terphenyl-d14 (Surr)	*83*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*84*		*15 - 110*
2-Fluorophenol (Surr)	*40*		*15 - 110*
2-Fluorobiphenyl	*73*		*30 - 130*

Lab Sample ID: LCS 460-548982/4-A
Matrix: Water
Analysis Batch: 549086

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548982

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	160	134		ug/L		84	20 - 160
Caprolactam	160	28.6	*	ug/L		18	20 - 160
Atrazine	160	141		ug/L		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*92*		*30 - 130*
Phenol-d5 (Surr)	*28*		*15 - 110*
Terphenyl-d14 (Surr)	*92*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*84*		*15 - 110*
2-Fluorophenol (Surr)	*45*		*15 - 110*
2-Fluorobiphenyl	*83*		*30 - 130*

Lab Sample ID: LCSD 460-548982/3-A
Matrix: Water
Analysis Batch: 549086

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 548982

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	80.0	32.6	*	ug/L		41	20 - 160	24	20

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

Lab Sample ID: LCSD 460-548982/3-A
Matrix: Water
Analysis Batch: 549086

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 548982

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chlorophenol	80.0	64.6		ug/L		81	70 - 130	17	20
2-Methylphenol	80.0	54.9	*	ug/L		69	70 - 130	19	20
4-Methylphenol	80.0	46.3		ug/L		58	20 - 160	20	20
2-Nitrophenol	80.0	93.8		ug/L		117	70 - 130	20	20
2,4-Dimethylphenol	80.0	69.0		ug/L		86	70 - 130	20	20
2,4-Dichlorophenol	80.0	73.6		ug/L		92	70 - 130	19	20
4-Chloro-3-methylphenol	80.0	65.5		ug/L		82	20 - 160	19	20
2,4,6-Trichlorophenol	80.0	80.1		ug/L		100	70 - 130	18	20
2,4,5-Trichlorophenol	80.0	76.6		ug/L		96	20 - 160	15	20
2,4-Dinitrotoluene	80.0	80.8		ug/L		101	70 - 130	10	20
4-Nitrophenol	160	56.9	*	ug/L		36	20 - 160	24	20
4,6-Dinitro-2-methylphenol	160	215		ug/L		134	20 - 160	13	20
Pentachlorophenol	160	142		ug/L		89	20 - 160	11	20
Bis(2-chloroethyl)ether	80.0	74.3		ug/L		93	70 - 130	18	20
N-Nitrosodi-n-propylamine	80.0	71.4		ug/L		89	70 - 130	18	20
Hexachloroethane	80.0	69.2		ug/L		87	20 - 160	18	20
Nitrobenzene	80.0	79.3		ug/L		99	70 - 130	17	20
Isophorone	80.0	77.5		ug/L		97	70 - 130	20	20
Naphthalene	80.0	73.7		ug/L		92	70 - 130	18	20
4-Chloroaniline	80.0	70.0		ug/L		87	20 - 160	17	20
Hexachlorobutadiene	80.0	68.1	*	ug/L		85	70 - 130	21	20
2-Methylnaphthalene	80.0	71.6		ug/L		90	70 - 130	18	20
Hexachlorocyclopentadiene	80.0	76.7		ug/L		96	20 - 160	19	20
2-Chloronaphthalene	80.0	73.7		ug/L		92	70 - 130	17	20
2-Nitroaniline	80.0	75.8		ug/L		95	20 - 160	16	20
Dimethyl phthalate	80.0	74.6		ug/L		93	70 - 130	15	20
Acenaphthylene	80.0	79.4		ug/L		99	70 - 130	18	20
2,6-Dinitrotoluene	80.0	84.7		ug/L		106	70 - 130	15	20
3-Nitroaniline	80.0	75.2		ug/L		94	20 - 160	15	20
Acenaphthene	80.0	71.8		ug/L		90	70 - 130	17	20
Dibenzofuran	80.0	72.6		ug/L		91	70 - 130	17	20
2,4-Dinitrophenol	160	208		ug/L		130	20 - 160	11	20
Diethyl phthalate	80.0	77.0		ug/L		96	70 - 130	13	20
4-Chlorophenyl phenyl ether	80.0	71.8		ug/L		90	70 - 130	15	20
Fluorene	80.0	72.0		ug/L		90	70 - 130	17	20
4-Nitroaniline	80.0	75.8		ug/L		95	20 - 160	13	20
N-Nitrosodiphenylamine	80.0	76.1		ug/L		95	70 - 130	16	20
4-Bromophenyl phenyl ether	80.0	74.0		ug/L		93	70 - 130	17	20
Hexachlorobenzene	80.0	74.5		ug/L		93	70 - 130	13	20
Phenanthrene	80.0	75.1		ug/L		94	70 - 130	15	20
Anthracene	80.0	75.7		ug/L		95	70 - 130	15	20
Carbazole	80.0	76.6		ug/L		96	70 - 130	13	20
Di-n-butyl phthalate	80.0	84.9		ug/L		106	70 - 130	12	20
Fluoranthene	80.0	77.1		ug/L		96	70 - 130	13	20
Pyrene	80.0	85.6		ug/L		107	70 - 130	13	20
Butyl benzyl phthalate	80.0	93.8		ug/L		117	70 - 130	13	20
Benzo[a]anthracene	80.0	82.2		ug/L		103	70 - 130	14	20
Chrysene	80.0	82.0		ug/L		103	70 - 130	14	20

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

Lab Sample ID: LCSD 460-548982/3-A
Matrix: Water
Analysis Batch: 549086

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 548982

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate			80.0	93.8		ug/L		117	70 - 130	13	20
Di-n-octyl phthalate			80.0	85.2		ug/L		106	70 - 130	11	20
Benzo[b]fluoranthene			80.0	85.7		ug/L		107	70 - 130	13	20
Benzo[k]fluoranthene			80.0	84.4		ug/L		105	70 - 130	13	20
Benzo[a]pyrene			80.0	84.9		ug/L		106	70 - 130	15	20
Indeno[1,2,3-cd]pyrene			80.0	74.5		ug/L		93	70 - 130	10	20
Dibenz(a,h)anthracene			80.0	78.7		ug/L		98	70 - 130	13	20
Benzo[g,h,i]perylene			80.0	78.1		ug/L		98	70 - 130	14	20
1,1'-Biphenyl			80.0	72.9		ug/L		91	70 - 130	18	20
Acetophenone			80.0	71.3		ug/L		89	70 - 130	18	20
2,2'-oxybis[1-chloropropane]			80.0	72.4		ug/L		90	70 - 130	19	20
1,2,4,5-Tetrachlorobenzene			80.0	71.3		ug/L		89	70 - 130	19	20
2,3,4,6-Tetrachlorophenol			80.0	81.7		ug/L		102	70 - 130	15	20
3,3'-Dichlorobenzidine			80.0	75.2		ug/L		94	70 - 130	15	20
Bis(2-chloroethoxy)methane			80.0	76.9		ug/L		96	70 - 130	19	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*93*		*30 - 130*
Phenol-d5 (Surr)	*32*		*15 - 110*
Terphenyl-d14 (Surr)	*92*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*90*		*15 - 110*
2-Fluorophenol (Surr)	*48*		*15 - 110*
2-Fluorobiphenyl	*86*		*30 - 130*

Lab Sample ID: LCSD 460-548982/5-A
Matrix: Water
Analysis Batch: 549086

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 548982

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzaldehyde			160	134		ug/L		83	20 - 160	0	20
Caprolactam			160	28.8	*	ug/L		18	20 - 160	1	20
Atrazine			160	139		ug/L		87	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*88*		*30 - 130*
Phenol-d5 (Surr)	*27*		*15 - 110*
Terphenyl-d14 (Surr)	*92*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*80*		*15 - 110*
2-Fluorophenol (Surr)	*42*		*15 - 110*
2-Fluorobiphenyl	*80*		*30 - 130*

Lab Sample ID: MB 460-548983/1-A
Matrix: Water
Analysis Batch: 549105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548983

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/31/18 14:35	08/31/18 23:44	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/31/18 14:35	08/31/18 23:44	1

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

Lab Sample ID: MB 460-548983/1-A
Matrix: Water
Analysis Batch: 549105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548983

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	0.26	U	10	0.26	ug/L		08/31/18 14:35	08/31/18 23:44	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:35	08/31/18 23:44	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 14:35	08/31/18 23:44	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 14:35	08/31/18 23:44	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 14:35	08/31/18 23:44	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 14:35	08/31/18 23:44	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 14:35	08/31/18 23:44	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 14:35	08/31/18 23:44	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 14:35	08/31/18 23:44	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/31/18 14:35	08/31/18 23:44	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 14:35	08/31/18 23:44	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		08/31/18 14:35	08/31/18 23:44	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		08/31/18 14:35	08/31/18 23:44	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 14:35	08/31/18 23:44	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 14:35	08/31/18 23:44	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 14:35	08/31/18 23:44	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 14:35	08/31/18 23:44	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:35	08/31/18 23:44	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 14:35	08/31/18 23:44	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/31/18 14:35	08/31/18 23:44	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 14:35	08/31/18 23:44	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 14:35	08/31/18 23:44	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 14:35	08/31/18 23:44	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 14:35	08/31/18 23:44	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 14:35	08/31/18 23:44	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 14:35	08/31/18 23:44	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 14:35	08/31/18 23:44	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 14:35	08/31/18 23:44	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 14:35	08/31/18 23:44	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 14:35	08/31/18 23:44	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 14:35	08/31/18 23:44	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 14:35	08/31/18 23:44	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 14:35	08/31/18 23:44	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 14:35	08/31/18 23:44	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 14:35	08/31/18 23:44	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 14:35	08/31/18 23:44	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 14:35	08/31/18 23:44	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		08/31/18 14:35	08/31/18 23:44	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 14:35	08/31/18 23:44	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 14:35	08/31/18 23:44	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 14:35	08/31/18 23:44	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 14:35	08/31/18 23:44	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 14:35	08/31/18 23:44	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 14:35	08/31/18 23:44	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 14:35	08/31/18 23:44	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		08/31/18 14:35	08/31/18 23:44	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 14:35	08/31/18 23:44	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 14:35	08/31/18 23:44	1

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

Lab Sample ID: MB 460-548983/1-A
Matrix: Water
Analysis Batch: 549105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548983

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 14:35	08/31/18 23:44	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		08/31/18 14:35	08/31/18 23:44	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 14:35	08/31/18 23:44	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		08/31/18 14:35	08/31/18 23:44	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		08/31/18 14:35	08/31/18 23:44	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		08/31/18 14:35	08/31/18 23:44	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 14:35	08/31/18 23:44	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 14:35	08/31/18 23:44	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 14:35	08/31/18 23:44	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 14:35	08/31/18 23:44	1
Caprolactam	0.68	U	10	0.68	ug/L		08/31/18 14:35	08/31/18 23:44	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/31/18 14:35	08/31/18 23:44	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/31/18 14:35	08/31/18 23:44	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 14:35	08/31/18 23:44	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 14:35	08/31/18 23:44	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 14:35	08/31/18 23:44	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 14:35	08/31/18 23:44	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/31/18 14:35*	*08/31/18 23:44*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*84*		*30 - 130*	*08/31/18 14:35*	*08/31/18 23:44*	*1*
Phenol-d5 (Surr)	*27*		*15 - 110*	*08/31/18 14:35*	*08/31/18 23:44*	*1*
Terphenyl-d14 (Surr)	*83*		*30 - 130*	*08/31/18 14:35*	*08/31/18 23:44*	*1*
2,4,6-Tribromophenol (Surr)	*86*		*15 - 110*	*08/31/18 14:35*	*08/31/18 23:44*	*1*
2-Fluorophenol (Surr)	*43*		*15 - 110*	*08/31/18 14:35*	*08/31/18 23:44*	*1*
2-Fluorobiphenyl	*86*		*30 - 130*	*08/31/18 14:35*	*08/31/18 23:44*	*1*

Lab Sample ID: LCS 460-548983/2-A
Matrix: Water
Analysis Batch: 549105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548983

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	80.0	21.5		ug/L		27	20 - 160
2-Chlorophenol	80.0	54.9	*	ug/L		69	70 - 130
2-Methylphenol	80.0	43.9	*	ug/L		55	70 - 130
4-Methylphenol	80.0	41.9		ug/L		52	20 - 160
2-Nitrophenol	80.0	67.8		ug/L		85	70 - 130
2,4-Dimethylphenol	80.0	59.0		ug/L		74	70 - 130
2,4-Dichlorophenol	80.0	63.8		ug/L		80	70 - 130
4-Chloro-3-methylphenol	80.0	57.7		ug/L		72	20 - 160
2,4,6-Trichlorophenol	80.0	65.2		ug/L		82	70 - 130
2,4,5-Trichlorophenol	80.0	66.6		ug/L		83	20 - 160
2,4-Dinitrotoluene	80.0	75.0		ug/L		94	70 - 130
4-Nitrophenol	160	47.5		ug/L		30	20 - 160
4,6-Dinitro-2-methylphenol	160	158		ug/L		99	20 - 160

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

Lab Sample ID: LCS 460-548983/2-A
Matrix: Water
Analysis Batch: 549105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548983

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	160	137		ug/L		86	20 - 160
Bis(2-chloroethyl)ether	80.0	60.5		ug/L		76	70 - 130
N-Nitrosodi-n-propylamine	80.0	59.3		ug/L		74	70 - 130
Hexachloroethane	80.0	59.6		ug/L		74	20 - 160
Nitrobenzene	80.0	63.6		ug/L		80	70 - 130
Isophorone	80.0	65.7		ug/L		82	70 - 130
Naphthalene	80.0	64.5		ug/L		81	70 - 130
4-Chloroaniline	80.0	62.1		ug/L		78	20 - 160
Hexachlorobutadiene	80.0	66.5		ug/L		83	70 - 130
2-Methylnaphthalene	80.0	63.5		ug/L		79	70 - 130
Hexachlorocyclopentadiene	80.0	59.1		ug/L		74	20 - 160
2-Chloronaphthalene	80.0	65.2		ug/L		81	70 - 130
2-Nitroaniline	80.0	64.7		ug/L		81	20 - 160
Dimethyl phthalate	80.0	68.7		ug/L		86	70 - 130
Acenaphthylene	80.0	70.9		ug/L		89	70 - 130
2,6-Dinitrotoluene	80.0	69.7		ug/L		87	70 - 130
3-Nitroaniline	80.0	60.8		ug/L		76	20 - 160
Acenaphthene	80.0	60.6		ug/L		76	70 - 130
Dibenzofuran	80.0	65.9		ug/L		82	70 - 130
2,4-Dinitrophenol	160	137		ug/L		85	20 - 160
Diethyl phthalate	80.0	71.2		ug/L		89	70 - 130
4-Chlorophenyl phenyl ether	80.0	67.5		ug/L		84	70 - 130
Fluorene	80.0	66.9		ug/L		84	70 - 130
4-Nitroaniline	80.0	69.9		ug/L		87	20 - 160
N-Nitrosodiphenylamine	80.0	68.6		ug/L		86	70 - 130
4-Bromophenyl phenyl ether	80.0	70.2		ug/L		88	70 - 130
Hexachlorobenzene	80.0	69.8		ug/L		87	70 - 130
Phenanthrene	80.0	69.8		ug/L		87	70 - 130
Anthracene	80.0	69.9		ug/L		87	70 - 130
Carbazole	80.0	72.1		ug/L		90	70 - 130
Di-n-butyl phthalate	80.0	75.4		ug/L		94	70 - 130
Fluoranthene	80.0	75.3		ug/L		94	70 - 130
Pyrene	80.0	70.4		ug/L		88	70 - 130
Butyl benzyl phthalate	80.0	74.8		ug/L		94	70 - 130
Benzo[a]anthracene	80.0	72.7		ug/L		91	70 - 130
Chrysene	80.0	73.3		ug/L		92	70 - 130
Bis(2-ethylhexyl) phthalate	80.0	74.4		ug/L		93	70 - 130
Di-n-octyl phthalate	80.0	73.0		ug/L		91	70 - 130
Benzo[b]fluoranthene	80.0	74.8		ug/L		94	70 - 130
Benzo[k]fluoranthene	80.0	80.6		ug/L		101	70 - 130
Benzo[a]pyrene	80.0	75.6		ug/L		95	70 - 130
Indeno[1,2,3-cd]pyrene	80.0	82.1		ug/L		103	70 - 130
Dibenz(a,h)anthracene	80.0	82.0		ug/L		102	70 - 130
Benzo[g,h,i]perylene	80.0	78.6		ug/L		98	70 - 130
1,1'-Biphenyl	80.0	65.6		ug/L		82	70 - 130
Acetophenone	80.0	61.1		ug/L		76	70 - 130
2,2'-oxybis[1-chloropropane]	80.0	54.8	*	ug/L		68	70 - 130
1,2,4,5-Tetrachlorobenzene	80.0	65.7		ug/L		82	70 - 130

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

Lab Sample ID: LCS 460-548983/2-A
Matrix: Water
Analysis Batch: 549105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548983

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,4,6-Tetrachlorophenol	80.0	68.9		ug/L		86	70 - 130
3,3'-Dichlorobenzidine	80.0	71.6		ug/L		90	70 - 130
Bis(2-chloroethoxy)methane	80.0	64.3		ug/L		80	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*78*		*30 - 130*
Phenol-d5 (Surr)	*25*		*15 - 110*
Terphenyl-d14 (Surr)	*83*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*93*		*15 - 110*
2-Fluorophenol (Surr)	*40*		*15 - 110*
2-Fluorobiphenyl	*81*		*30 - 130*

Lab Sample ID: LCS 460-548983/3-A
Matrix: Water
Analysis Batch: 549105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548983

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	160	132		ug/L		82	20 - 160
Caprolactam	160	33.2		ug/L		21	20 - 160
Atrazine	160	151		ug/L		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*91*		*30 - 130*
Phenol-d5 (Surr)	*27*		*15 - 110*
Terphenyl-d14 (Surr)	*87*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*95*		*15 - 110*
2-Fluorophenol (Surr)	*45*		*15 - 110*
2-Fluorobiphenyl	*92*		*30 - 130*

Lab Sample ID: 460-163528-E-1-A MS
Matrix: Water
Analysis Batch: 549105

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 548983

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	0.29	U	80.0	23.4		ug/L		29	20 - 160
2-Chlorophenol	0.38	U * F1	80.0	56.3		ug/L		70	70 - 130
2-Methylphenol	0.26	U * F1	80.0	44.7	F1	ug/L		56	70 - 130
4-Methylphenol	0.24	U	80.0	39.3		ug/L		49	20 - 160
2-Nitrophenol	0.75	U	80.0	69.9		ug/L		87	70 - 130
2,4-Dimethylphenol	0.24	U	80.0	59.7		ug/L		75	70 - 130
2,4-Dichlorophenol	0.42	U	80.0	66.0		ug/L		83	70 - 130
4-Chloro-3-methylphenol	0.58	U	80.0	59.5		ug/L		74	20 - 160
2,4,6-Trichlorophenol	0.30	U	80.0	68.9		ug/L		86	20 - 160
2,4,5-Trichlorophenol	0.28	U	80.0	69.0		ug/L		86	20 - 160
2,4-Dinitrotoluene	1.0	U	80.0	73.3		ug/L		92	70 - 130
4-Nitrophenol	0.69	U	160	44.3		ug/L		28	20 - 160
4,6-Dinitro-2-methylphenol	13	U	160	149		ug/L		93	20 - 160
Pentachlorophenol	1.4	U	160	135		ug/L		84	20 - 160

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

Lab Sample ID: 460-163528-E-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549105 — **Prep Batch: 548983**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	0.30	U	80.0	58.7		ug/L		73	70 - 130
N-Nitrosodi-n-propylamine	0.43	U	80.0	58.4		ug/L		73	70 - 130
Hexachloroethane	1.2	U	80.0	55.1		ug/L		69	20 - 160
Nitrobenzene	0.57	U	80.0	64.4		ug/L		80	70 - 130
Isophorone	0.80	U	80.0	65.3		ug/L		82	70 - 130
Naphthalene	1.1	U	80.0	64.5		ug/L		81	70 - 130
4-Chloroaniline	1.9	U	80.0	29.6		ug/L		37	20 - 160
Hexachlorobutadiene	0.78	U	80.0	67.0		ug/L		84	70 - 130
2-Methylnaphthalene	1.1	U	80.0	65.4		ug/L		82	70 - 130
Hexachlorocyclopentadiene	1.7	U	80.0	77.4		ug/L		97	20 - 160
2-Chloronaphthalene	1.2	U	80.0	67.8		ug/L		85	70 - 130
2-Nitroaniline	0.47	U	80.0	42.8		ug/L		53	20 - 160
Dimethyl phthalate	0.77	U	80.0	69.0		ug/L		86	70 - 130
Acenaphthylene	0.82	U	80.0	73.5		ug/L		92	70 - 130
2,6-Dinitrotoluene	0.39	U	80.0	71.7		ug/L		90	70 - 130
3-Nitroaniline	0.96	U	80.0	16.0		ug/L		20	20 - 160
Acenaphthene	1.1	U	80.0	62.9		ug/L		79	70 - 130
Dibenzofuran	1.1	U	80.0	67.7		ug/L		85	70 - 130
2,4-Dinitrophenol	14	U	160	128		ug/L		80	20 - 160
Diethyl phthalate	0.98	U	80.0	69.2		ug/L		86	70 - 130
4-Chlorophenyl phenyl ether	1.3	U	80.0	68.7		ug/L		86	70 - 130
Fluorene	0.91	U	80.0	67.8		ug/L		85	70 - 130
4-Nitroaniline	0.54	U F1	80.0	8.66	J F1	ug/L		11	20 - 160
N-Nitrosodiphenylamine	0.89	U	80.0	68.2		ug/L		85	70 - 130
4-Bromophenyl phenyl ether	0.75	U	80.0	70.8		ug/L		88	70 - 130
Hexachlorobenzene	0.40	U	80.0	71.2		ug/L		89	70 - 130
Phenanthrene	0.58	U	80.0	68.8		ug/L		86	70 - 130
Anthracene	0.63	U	80.0	69.5		ug/L		87	70 - 130
Carbazole	0.68	U	80.0	70.9		ug/L		89	70 - 130
Di-n-butyl phthalate	0.84	U	80.0	73.4		ug/L		92	70 - 130
Fluoranthene	0.84	U	80.0	73.1		ug/L		91	70 - 130
Pyrene	1.6	U	80.0	66.9		ug/L		84	70 - 130
Butyl benzyl phthalate	0.85	U	80.0	71.5		ug/L		89	70 - 130
Benzo[a]anthracene	0.59	U	80.0	69.7		ug/L		87	70 - 130
Chrysene	0.91	U	80.0	70.8		ug/L		88	70 - 130
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	70.9		ug/L		89	70 - 130
Di-n-octyl phthalate	4.8	U	80.0	69.7		ug/L		87	70 - 130
Benzo[b]fluoranthene	1.1	U	80.0	72.1		ug/L		90	70 - 130
Benzo[k]fluoranthene	0.67	U	80.0	74.2		ug/L		93	70 - 130
Benzo[a]pyrene	0.41	U	80.0	72.9		ug/L		91	70 - 130
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	75.6		ug/L		95	70 - 130
Dibenz(a,h)anthracene	0.72	U	80.0	75.9		ug/L		95	70 - 130
Benzo[g,h,i]perylene	1.4	U	80.0	74.0		ug/L		92	70 - 130
1,1'-Biphenyl	1.2	U	80.0	67.4		ug/L		84	70 - 130
Acetophenone	0.79	U	80.0	59.4		ug/L		74	70 - 130
Benzaldehyde	0.59	U	160	113		ug/L		71	20 - 160
Caprolactam	0.68	U F1	160	24.2	F1	ug/L		15	20 - 160
Atrazine	1.3	U	160	136		ug/L		85	70 - 130

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

Lab Sample ID: 460-163528-E-1-A MS
Matrix: Water
Analysis Batch: 549105

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 548983

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2'-oxybis[1-chloropropane]	0.63	U * F1	80.0	53.6	F1	ug/L		67	70 - 130
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	69.6		ug/L		87	70 - 130
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	69.1		ug/L		86	70 - 130
3,3'-Dichlorobenzidine	1.4	U F1	80.0	4.43	J F1	ug/L		6	70 - 130
Bis(2-chloroethoxy)methane	0.24	U	80.0	64.5		ug/L		81	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*80*		*30 - 130*
Phenol-d5 (Surr)	*25*		*15 - 110*
Terphenyl-d14 (Surr)	*75*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*93*		*15 - 110*
2-Fluorophenol (Surr)	*41*		*15 - 110*
2-Fluorobiphenyl	*86*		*30 - 130*

Lab Sample ID: 460-163528-E-1-B MSD
Matrix: Water
Analysis Batch: 549105

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 548983

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	0.29	U	80.0	23.3		ug/L		29	20 - 160	1	20
2-Chlorophenol	0.38	U * F1	80.0	55.1	F1	ug/L		69	70 - 130	2	20
2-Methylphenol	0.26	U * F1	80.0	44.7	F1	ug/L		56	70 - 130	0	20
4-Methylphenol	0.24	U	80.0	39.9		ug/L		50	20 - 160	1	20
2-Nitrophenol	0.75	U	80.0	69.5		ug/L		87	70 - 130	1	20
2,4-Dimethylphenol	0.24	U	80.0	61.0		ug/L		76	70 - 130	2	20
2,4-Dichlorophenol	0.42	U	80.0	65.7		ug/L		82	70 - 130	0	20
4-Chloro-3-methylphenol	0.58	U	80.0	60.3		ug/L		75	20 - 160	1	20
2,4,6-Trichlorophenol	0.30	U	80.0	67.2		ug/L		84	20 - 160	2	20
2,4,5-Trichlorophenol	0.28	U	80.0	67.8		ug/L		85	20 - 160	2	20
2,4-Dinitrotoluene	1.0	U	80.0	71.5		ug/L		89	70 - 130	3	20
4-Nitrophenol	0.69	U	160	45.6		ug/L		29	20 - 160	3	20
4,6-Dinitro-2-methylphenol	13	U	160	150		ug/L		94	20 - 160	0	20
Pentachlorophenol	1.4	U	160	135		ug/L		85	20 - 160	0	20
Bis(2-chloroethyl)ether	0.30	U	80.0	57.6		ug/L		72	70 - 130	2	20
N-Nitrosodi-n-propylamine	0.43	U	80.0	57.7		ug/L		72	70 - 130	1	20
Hexachloroethane	1.2	U	80.0	52.5		ug/L		66	20 - 160	5	20
Nitrobenzene	0.57	U	80.0	63.6		ug/L		79	70 - 130	1	20
Isophorone	0.80	U	80.0	66.2		ug/L		83	70 - 130	1	20
Naphthalene	1.1	U	80.0	63.4		ug/L		79	70 - 130	2	20
4-Chloroaniline	1.9	U	80.0	30.9		ug/L		39	20 - 160	5	20
Hexachlorobutadiene	0.78	U	80.0	64.5		ug/L		81	70 - 130	4	20
2-Methylnaphthalene	1.1	U	80.0	64.9		ug/L		81	70 - 130	1	20
Hexachlorocyclopentadiene	1.7	U	80.0	72.3		ug/L		90	20 - 160	7	20
2-Chloronaphthalene	1.2	U	80.0	65.7		ug/L		82	70 - 130	3	20
2-Nitroaniline	0.47	U	80.0	42.5		ug/L		53	20 - 160	1	20
Dimethyl phthalate	0.77	U	80.0	68.8		ug/L		86	70 - 130	0	20
Acenaphthylene	0.82	U	80.0	71.7		ug/L		90	70 - 130	2	20
2,6-Dinitrotoluene	0.39	U	80.0	71.5		ug/L		89	70 - 130	0	20

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

Lab Sample ID: 460-163528-E-1-B MSD
Matrix: Water
Analysis Batch: 549105

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 548983

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3-Nitroaniline	0.96	U	80.0	16.7		ug/L		21	20 - 160	5	20
Acenaphthene	1.1	U	80.0	60.2		ug/L		75	70 - 130	4	20
Dibenzofuran	1.1	U	80.0	66.6		ug/L		83	70 - 130	2	20
2,4-Dinitrophenol	14	U	160	132		ug/L		82	20 - 160	3	20
Diethyl phthalate	0.98	U	80.0	68.1		ug/L		85	70 - 130	2	20
4-Chlorophenyl phenyl ether	1.3	U	80.0	67.4		ug/L		84	70 - 130	2	20
Fluorene	0.91	U	80.0	67.1		ug/L		84	70 - 130	1	20
4-Nitroaniline	0.54	U F1	80.0	9.68	J F1	ug/L		12	20 - 160	11	20
N-Nitrosodiphenylamine	0.89	U	80.0	66.2		ug/L		83	70 - 130	3	20
4-Bromophenyl phenyl ether	0.75	U	80.0	71.0		ug/L		89	70 - 130	0	20
Hexachlorobenzene	0.40	U	80.0	70.0		ug/L		87	70 - 130	2	20
Phenanthrene	0.58	U	80.0	66.6		ug/L		83	70 - 130	3	20
Anthracene	0.63	U	80.0	67.7		ug/L		85	70 - 130	3	20
Carbazole	0.68	U	80.0	68.7		ug/L		86	70 - 130	3	20
Di-n-butyl phthalate	0.84	U	80.0	71.4		ug/L		89	70 - 130	3	20
Fluoranthene	0.84	U	80.0	71.1		ug/L		89	70 - 130	3	20
Pyrene	1.6	U	80.0	64.9		ug/L		81	70 - 130	3	20
Butyl benzyl phthalate	0.85	U	80.0	70.4		ug/L		88	70 - 130	2	20
Benzo[a]anthracene	0.59	U	80.0	67.8		ug/L		85	70 - 130	3	20
Chrysene	0.91	U	80.0	68.4		ug/L		85	70 - 130	3	20
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	68.5		ug/L		86	70 - 130	3	20
Di-n-octyl phthalate	4.8	U	80.0	68.4		ug/L		86	70 - 130	2	20
Benzo[b]fluoranthene	1.1	U	80.0	68.6		ug/L		86	70 - 130	5	20
Benzo[k]fluoranthene	0.67	U	80.0	71.6		ug/L		89	70 - 130	4	20
Benzo[a]pyrene	0.41	U	80.0	70.3		ug/L		88	70 - 130	4	20
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	74.5		ug/L		93	70 - 130	1	20
Dibenz(a,h)anthracene	0.72	U	80.0	73.5		ug/L		92	70 - 130	3	20
Benzo[g,h,i]perylene	1.4	U	80.0	71.9		ug/L		90	70 - 130	3	20
1,1'-Biphenyl	1.2	U	80.0	65.4		ug/L		82	70 - 130	3	20
Acetophenone	0.79	U	80.0	59.7		ug/L		75	70 - 130	0	20
Benzaldehyde	0.59	U	160	119		ug/L		74	20 - 160	5	20
Caprolactam	0.68	U F1	160	26.8	F1	ug/L		17	20 - 160	10	20
Atrazine	1.3	U	160	143		ug/L		89	70 - 130	4	20
2,2'-oxybis[1-chloropropane]	0.63	U * F1	80.0	51.5	F1	ug/L		64	70 - 130	4	20
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	67.1		ug/L		84	70 - 130	4	20
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	69.8		ug/L		87	70 - 130	1	20
3,3'-Dichlorobenzidine	1.4	U F1	80.0	4.97	J F1	ug/L		6	70 - 130	11	20
Bis(2-chloroethoxy)methane	0.24	U	80.0	64.5		ug/L		81	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*83*		*30 - 130*
Phenol-d5 (Surr)	*26*		*15 - 110*
Terphenyl-d14 (Surr)	*75*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*98*		*15 - 110*
2-Fluorophenol (Surr)	*43*		*15 - 110*
2-Fluorobiphenyl	*86*		*30 - 130*

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

Lab Sample ID: MB 460-548982/1-A
Matrix: Water
Analysis Batch: 549291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548982

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 14:26	09/02/18 03:59	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 14:26	09/02/18 03:59	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 14:26	09/02/18 03:59	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 14:26	09/02/18 03:59	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/31/18 14:26	09/02/18 03:59	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/31/18 14:26	09/02/18 03:59	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/31/18 14:26	09/02/18 03:59	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 14:26	09/02/18 03:59	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/31/18 14:26	09/02/18 03:59	1

Lab Sample ID: LCS 460-548982/6-A
Matrix: Water
Analysis Batch: 549291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548982

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.663		ug/L		83	70 - 130
Benzo[a]pyrene	0.800	0.784		ug/L		98	70 - 130
Benzo[b]fluoranthene	0.800	0.807		ug/L		101	70 - 130
Bis(2-chloroethyl)ether	0.800	0.852		ug/L		106	70 - 130
Dibenz(a,h)anthracene	0.800	0.708		ug/L		89	70 - 130
Hexachlorobenzene	0.800	1.01		ug/L		126	70 - 130
Indeno[1,2,3-cd]pyrene	0.800	0.695		ug/L		87	70 - 130
N-Nitrosodimethylamine	0.800	0.521		ug/L		65	20 - 160
Pentachlorophenol	1.60	1.62		ug/L		101	20 - 160

Lab Sample ID: LCSD 460-548982/7-A
Matrix: Water
Analysis Batch: 549291

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 548982

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.751		ug/L		94	70 - 130	13	20
Benzo[a]pyrene	0.800	0.877		ug/L		110	70 - 130	11	20
Benzo[b]fluoranthene	0.800	0.907		ug/L		113	70 - 130	12	20
Bis(2-chloroethyl)ether	0.800	0.950		ug/L		119	70 - 130	11	20
Dibenz(a,h)anthracene	0.800	0.813		ug/L		102	70 - 130	14	20
Hexachlorobenzene	0.800	1.10	*	ug/L		137	70 - 130	8	20
Indeno[1,2,3-cd]pyrene	0.800	0.801		ug/L		100	70 - 130	14	20
N-Nitrosodimethylamine	0.800	0.544		ug/L		68	20 - 160	4	20
Pentachlorophenol	1.60	1.25	*	ug/L		78	20 - 160	26	20

Lab Sample ID: MB 460-548983/1-A
Matrix: Water
Analysis Batch: 549291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548983

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 14:35	09/02/18 07:31	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 14:35	09/02/18 07:31	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 14:35	09/02/18 07:31	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 14:35	09/02/18 07:31	1

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

Lab Sample ID: MB 460-548983/1-A
Matrix: Water
Analysis Batch: 549291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548983

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/31/18 14:35	09/02/18 07:31	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/31/18 14:35	09/02/18 07:31	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/31/18 14:35	09/02/18 07:31	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 14:35	09/02/18 07:31	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/31/18 14:35	09/02/18 07:31	1

Lab Sample ID: LCS 460-548983/4-A
Matrix: Water
Analysis Batch: 549509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548983

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.680		ug/L		85	70 - 130
Benzo[a]pyrene	0.800	0.786		ug/L		98	70 - 130
Benzo[b]fluoranthene	0.800	0.755		ug/L		94	70 - 130
Bis(2-chloroethyl)ether	0.800	0.904		ug/L		113	70 - 130
Dibenz(a,h)anthracene	0.800	1.13	*	ug/L		141	70 - 130
Hexachlorobenzene	0.800	0.777		ug/L		97	70 - 130
Indeno[1,2,3-cd]pyrene	0.800	1.02		ug/L		128	70 - 130
N-Nitrosodimethylamine	0.800	0.488		ug/L		61	20 - 160
Pentachlorophenol	1.60	1.49		ug/L		93	20 - 160

Lab Sample ID: LCSD 460-548983/5-A
Matrix: Water
Analysis Batch: 549509

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 548983

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.771		ug/L		96	70 - 130	12	20
Benzo[a]pyrene	0.800	0.801		ug/L		100	70 - 130	2	20
Benzo[b]fluoranthene	0.800	0.743		ug/L		93	70 - 130	2	20
Bis(2-chloroethyl)ether	0.800	0.844		ug/L		105	70 - 130	7	20
Dibenz(a,h)anthracene	0.800	1.08	*	ug/L		135	70 - 130	4	20
Hexachlorobenzene	0.800	0.732		ug/L		92	70 - 130	6	20
Indeno[1,2,3-cd]pyrene	0.800	0.977		ug/L		122	70 - 130	5	20
N-Nitrosodimethylamine	0.800	0.419		ug/L		52	20 - 160	15	20
Pentachlorophenol	1.60	0.365	*	ug/L		23	20 - 160	121	20

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 460-548897/1-A
Matrix: Water
Analysis Batch: 548987

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548897

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		08/31/18 09:08	08/31/18 15:44	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*32*		*10 - 150*	*08/31/18 09:08*	*08/31/18 15:44*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: LCS 460-548897/2-A
Matrix: Water
Analysis Batch: 548987

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548897

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			1.60	2.12		ug/L		132	10 - 200		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*33*		*10 - 200*

Lab Sample ID: LCSD 460-548897/3-A
Matrix: Water
Analysis Batch: 548987

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 548897

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			1.60	2.09		ug/L		131	10 - 200	1	50

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,4-Dioxane-d8	*33*		*10 - 200*

Lab Sample ID: 460-163445-I-1-A MS
Matrix: Water
Analysis Batch: 548987

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 548897

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	0.016	U	1.60	1.85		ug/L		115	70 - 130		

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*33*		*10 - 150*

Lab Sample ID: 460-163445-I-1-B MSD
Matrix: Water
Analysis Batch: 548987

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 548897

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.016	U	1.60	1.71		ug/L		107	70 - 130	7	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*35*		*10 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 460-548909/1-A
Matrix: Water
Analysis Batch: 549201

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548909

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 18:16	1
PCB-1016	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 18:16	1
PCB-1221	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 18:16	1
PCB-1232	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 18:16	1
PCB-1242	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 18:16	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 460-548909/1-A
Matrix: Water
Analysis Batch: 549201

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 548909

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	0.12	U	0.40	0.12	ug/L		08/31/18 09:38	09/01/18 18:16	1
PCB-1254	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 18:16	1
PCB-1260	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 18:16	1
PCB-1262	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 18:16	1
PCB-1268	0.11	U	0.40	0.11	ug/L		08/31/18 09:38	09/01/18 18:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*30 - 150*	*08/31/18 09:38*	*09/01/18 18:16*	*1*
Tetrachloro-m-xylene	*78*		*30 - 150*	*08/31/18 09:38*	*09/01/18 18:16*	*1*
DCB Decachlorobiphenyl	*98*		*30 - 150*	*08/31/18 09:38*	*09/01/18 18:16*	*1*
DCB Decachlorobiphenyl	*90*		*30 - 150*	*08/31/18 09:38*	*09/01/18 18:16*	*1*

Lab Sample ID: LCS 460-548909/2-A
Matrix: Water
Analysis Batch: 549201

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 548909

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.79		ug/L		95	40 - 140
PCB-1016	4.00	3.92		ug/L		98	40 - 140
PCB-1260	4.00	4.10		ug/L		103	40 - 140
PCB-1260	4.00	3.93		ug/L		98	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*79*		*30 - 150*
Tetrachloro-m-xylene	*82*		*30 - 150*
DCB Decachlorobiphenyl	*92*		*30 - 150*
DCB Decachlorobiphenyl	*90*		*30 - 150*

Lab Sample ID: LCSD 460-548909/3-A
Matrix: Water
Analysis Batch: 549201

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 548909

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	4.00	3.92		ug/L		98	40 - 140	3	20
PCB-1016	4.00	4.06		ug/L		102	40 - 140	4	20
PCB-1260	4.00	4.40		ug/L		110	40 - 140	7	20
PCB-1260	4.00	4.20		ug/L		105	40 - 140	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*80*		*30 - 150*
Tetrachloro-m-xylene	*80*		*30 - 150*
DCB Decachlorobiphenyl	*99*		*30 - 150*
DCB Decachlorobiphenyl	*94*		*30 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 460-548709/33
Matrix: Water
Analysis Batch: 548709

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/31/18 03:35	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/31/18 03:35	1

Lab Sample ID: LCS 460-548709/35
Matrix: Water
Analysis Batch: 548709

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.474		mg/L		98	90 - 110
Sulfate	7.50	7.626		mg/L		102	90 - 110

Lab Sample ID: LCSD 460-548709/36
Matrix: Water
Analysis Batch: 548709

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.50	1.461		mg/L		97	90 - 110	1	15
Sulfate	7.50	7.318		mg/L		98	90 - 110	4	15

Lab Sample ID: 460-163526-4 MS
Matrix: Water
Analysis Batch: 548709

Client Sample ID: RW10A (75-85)-082818
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.23		0.0750	4.670	4	mg/L		1920	90 - 110

Lab Sample ID: 460-163526-4 MSD
Matrix: Water
Analysis Batch: 548709

Client Sample ID: RW10A (75-85)-082818
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3.23		0.0750	4.669	4	mg/L		1918	90 - 110	0	15

Lab Sample ID: 460-163526-4 DU
Matrix: Water
Analysis Batch: 548709

Client Sample ID: RW10A (75-85)-082818
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	3.23		3.222		mg/L		0.3	15

Lab Sample ID: MB 460-548942/3
Matrix: Water
Analysis Batch: 548942

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/31/18 05:11	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/31/18 05:11	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 460-548942/5
Matrix: Water
Analysis Batch: 548942

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.404		mg/L		94	90 - 110
Sulfate	7.50	7.296		mg/L		97	90 - 110

Lab Sample ID: LCSD 460-548942/6
Matrix: Water
Analysis Batch: 548942

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.50	1.386		mg/L		92	90 - 110	1	15
Sulfate	7.50	7.216		mg/L		96	90 - 110	1	15

Method: 9056A - Anions, Ion Chromatography - DL

Lab Sample ID: 460-163526-4 MS
Matrix: Water
Analysis Batch: 548942

Client Sample ID: RW10A (75-85)-082818
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL	2.84	D F2	0.0752	4.214	4	mg/L		1832	90 - 110
Sulfate - DL	36.9	D F2	0.376	43.90	4	mg/L		1875	90 - 110

Lab Sample ID: 460-163526-4 MSD
Matrix: Water
Analysis Batch: 548942

Client Sample ID: RW10A (75-85)-082818
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride - DL	2.84	D F2	0.0752	3.497	4 F2	mg/L		878	90 - 110	19	15
Sulfate - DL	36.9	D F2	0.376	36.66	4 F2	mg/L		-53	90 - 110	18	15

Lab Sample ID: 460-163526-4 DU
Matrix: Water
Analysis Batch: 548942

Client Sample ID: RW10A (75-85)-082818
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	2.84	D F2	2.935		mg/L		3	15
Sulfate - DL	36.9	D F2	38.28		mg/L		4	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 460-549767/1-A ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549767

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/05/18 08:58	09/05/18 19:45	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/05/18 08:58	09/05/18 19:45	2
Barium	1.1	U	4.0	1.1	ug/L		09/05/18 08:58	09/05/18 19:45	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/05/18 08:58	09/05/18 19:45	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/05/18 08:58	09/05/18 19:45	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-549767/1-A ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549767

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/05/18 19:45	2
Chromium	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/05/18 19:45	2
Manganese	2.7	U	8.0	2.7	ug/L		09/05/18 08:58	09/05/18 19:45	2
Nickel	1.3	U	4.0	1.3	ug/L		09/05/18 08:58	09/05/18 19:45	2
Lead	0.37	U	1.2	0.37	ug/L		09/05/18 08:58	09/05/18 19:45	2
Antimony	0.62	U	2.0	0.62	ug/L		09/05/18 08:58	09/05/18 19:45	2
Selenium	0.69	U	10.0	0.69	ug/L		09/05/18 08:58	09/05/18 19:45	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/05/18 08:58	09/05/18 19:45	2
Zinc	5.4	U	16.0	5.4	ug/L		09/05/18 08:58	09/05/18 19:45	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/05/18 08:58	09/05/18 19:45	2
Sodium	75.7	U	200	75.7	ug/L		09/05/18 08:58	09/05/18 19:45	2
Magnesium	65.7	U	200	65.7	ug/L		09/05/18 08:58	09/05/18 19:45	2
Potassium	64.9	U	200	64.9	ug/L		09/05/18 08:58	09/05/18 19:45	2
Calcium	67.6	U	200	67.6	ug/L		09/05/18 08:58	09/05/18 19:45	2
Iron	45.7	U	120	45.7	ug/L		09/05/18 08:58	09/05/18 19:45	2
Thallium	0.24	U	0.80	0.24	ug/L		09/05/18 08:58	09/05/18 19:45	2

Lab Sample ID: MB 460-549767/1-A ^2
Matrix: Water
Analysis Batch: 550229

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549767

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.9	U	4.0	1.9	ug/L		09/05/18 08:58	09/06/18 19:03	2

Lab Sample ID: LCS 460-549767/2-A ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549767

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	24.40		ug/L		98	80 - 120
Arsenic	50.0	49.93		ug/L		100	80 - 120
Barium	50.0	48.11		ug/L		96	80 - 120
Beryllium	25.0	25.36		ug/L		101	80 - 120
Cadmium	25.0	24.27		ug/L		97	80 - 120
Cobalt	25.0	23.55		ug/L		94	80 - 120
Chromium	50.0	47.94		ug/L		96	80 - 120
Copper	50.0	50.16		ug/L		100	80 - 120
Manganese	250	243.9		ug/L		98	80 - 120
Nickel	50.0	48.05		ug/L		96	80 - 120
Lead	25.0	24.27		ug/L		97	80 - 120
Antimony	25.0	23.47		ug/L		94	80 - 120
Selenium	50.0	51.18		ug/L		102	80 - 120
Vanadium	50.0	46.77		ug/L		94	80 - 120
Zinc	250	240.8		ug/L		96	80 - 120
Aluminum	2500	2370		ug/L		95	80 - 120
Sodium	2500	2494		ug/L		100	80 - 120
Magnesium	2500	2447		ug/L		98	80 - 120
Potassium	2500	2385		ug/L		95	80 - 120
Calcium	2500	2583		ug/L		103	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-549767/2-A ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549767

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron			2500	2416		ug/L		97	80 - 120		
Thallium			20.0	19.17		ug/L		96	80 - 120		

Lab Sample ID: 460-163433-M-2-D MS ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 549767

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silver	1.4	U	25.0	23.50		ug/L		94	75 - 125		
Arsenic	5.7		50.0	55.99		ug/L		101	75 - 125		
Barium	322		50.0	390.4	4	ug/L		136	75 - 125		
Beryllium	0.26	U	25.0	27.09		ug/L		108	75 - 125		
Cadmium	0.61	U	25.0	24.17		ug/L		97	75 - 125		
Cobalt	1.4	J	25.0	24.08		ug/L		91	75 - 125		
Chromium	46.1		50.0	97.41		ug/L		103	75 - 125		
Copper	11.8		50.0	57.15		ug/L		91	75 - 125		
Manganese	4320		250	4682	4	ug/L		144	75 - 125		
Nickel	28.6		50.0	76.17		ug/L		95	75 - 125		
Lead	7.9		25.0	34.89		ug/L		108	75 - 125		
Antimony	0.62	U	25.0	25.55		ug/L		102	75 - 125		
Selenium	0.69	U	50.0	48.15		ug/L		96	75 - 125		
Vanadium	4.1		50.0	53.08		ug/L		98	75 - 125		
Zinc	10.7	J	250	243.1		ug/L		93	75 - 125		
Aluminum	764		2500	3266		ug/L		100	75 - 125		
Magnesium	28400		2500	31990	4	ug/L		144	75 - 125		
Potassium	33500		2500	36950	4	ug/L		137	75 - 125		
Calcium	237000		2500	249200	4	ug/L		486	75 - 125		
Iron	13800		2500	16870	4	ug/L		124	75 - 125		
Thallium	0.24	U	20.0	21.01		ug/L		105	75 - 125		

Lab Sample ID: 460-163433-M-2-D MS ^20
Matrix: Water
Analysis Batch: 550229

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 549767

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sodium	1290000		2500	1274000	4	ug/L		-443	75 - 125		

Lab Sample ID: 460-163433-M-2-C DU ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 549767

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Silver	1.4	U		1.4	U	ug/L				NC	20
Arsenic	5.7			5.64		ug/L				1	20
Barium	322			324.5		ug/L				0.6	20
Beryllium	0.26	U		0.26	U	ug/L				NC	20
Cadmium	0.61	U		0.61	U	ug/L				NC	20
Cobalt	1.4	J		1.36	J	ug/L				2	20
Chromium	46.1			44.26		ug/L				4	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163433-M-2-C DU ^2
Matrix: Water
Analysis Batch: 549850

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 549767

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Copper	11.8			12.08		ug/L				2	20
Manganese	4320			4374		ug/L				1	20
Nickel	28.6			27.52		ug/L				4	20
Lead	7.9			7.84		ug/L				0.2	20
Antimony	0.62	U		0.676	J	ug/L				NC	20
Selenium	0.69	U		0.69	U	ug/L				NC	20
Vanadium	4.1			4.06		ug/L				1	20
Zinc	10.7	J		12.37	J	ug/L				14	20
Aluminum	764			695.5		ug/L				9	20
Magnesium	28400			28920		ug/L				2	20
Potassium	33500			33590		ug/L				0.2	20
Calcium	237000			240500		ug/L				1	20
Iron	13800			13890		ug/L				0.8	20
Thallium	0.24	U		0.24	U	ug/L				NC	20

Lab Sample ID: 460-163433-M-2-C DU ^20
Matrix: Water
Analysis Batch: 550229

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 549767

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sodium	1290000			1267000		ug/L				1	20

Lab Sample ID: LCS 460-550997/2-A
Matrix: Water
Analysis Batch: 550980

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550997

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silver			5.00	4.94		ug/L		99	80 - 120		
Arsenic			10.0	10.05		ug/L		101	80 - 120		
Barium			10.0	10.21		ug/L		102	80 - 120		
Beryllium			5.00	4.91		ug/L		98	80 - 120		
Cadmium			5.00	5.20		ug/L		104	80 - 120		
Cobalt			5.00	4.91		ug/L		98	80 - 120		
Chromium			10.0	9.80		ug/L		98	80 - 120		
Copper			10.0	9.96		ug/L		100	80 - 120		
Manganese			50.0	51.44		ug/L		103	80 - 120		
Nickel			10.0	10.12		ug/L		101	80 - 120		
Lead			5.00	5.08		ug/L		102	80 - 120		
Antimony			5.00	5.08		ug/L		102	80 - 120		
Selenium			10.0	10.07		ug/L		101	80 - 120		
Vanadium			10.0	9.85		ug/L		98	80 - 120		
Zinc			50.0	49.08		ug/L		98	80 - 120		
Aluminum			500	495.5		ug/L		99	80 - 120		
Sodium			500	505.8		ug/L		101	80 - 120		
Magnesium			500	490.0		ug/L		98	80 - 120		
Potassium			500	504.9		ug/L		101	80 - 120		
Calcium			500	534.2		ug/L		107	80 - 120		
Iron			500	523.7		ug/L		105	80 - 120		
Thallium			4.00	4.01		ug/L		100	80 - 120		

Lab Sample ID: MB 460-549811/1-C
Matrix: Water
Analysis Batch: 550980

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 550997

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.68	U	1.0	0.68	ug/L		09/10/18 16:34	09/10/18 17:12	1
Arsenic	0.38	U	1.0	0.38	ug/L		09/10/18 16:34	09/10/18 17:12	1
Barium	0.57	U	2.0	0.57	ug/L		09/10/18 16:34	09/10/18 17:12	1
Beryllium	0.13	U	0.40	0.13	ug/L		09/10/18 16:34	09/10/18 17:12	1
Cadmium	0.31	U	1.0	0.31	ug/L		09/10/18 16:34	09/10/18 17:12	1
Cobalt	0.64	U	2.0	0.64	ug/L		09/10/18 16:34	09/10/18 17:12	1
Chromium	0.66	U	2.0	0.66	ug/L		09/10/18 16:34	09/10/18 17:12	1
Copper	0.95	U	2.0	0.95	ug/L		09/10/18 16:34	09/10/18 17:12	1
Manganese	1.3	U	4.0	1.3	ug/L		09/10/18 16:34	09/10/18 17:12	1
Nickel	0.65	U	2.0	0.65	ug/L		09/10/18 16:34	09/10/18 17:12	1
Lead	0.19	U	0.60	0.19	ug/L		09/10/18 16:34	09/10/18 17:12	1
Antimony	0.31	U	1.0	0.31	ug/L		09/10/18 16:34	09/10/18 17:12	1
Selenium	0.35	U	5.0	0.35	ug/L		09/10/18 16:34	09/10/18 17:12	1
Vanadium	0.59	U	2.0	0.59	ug/L		09/10/18 16:34	09/10/18 17:12	1
Zinc	2.7	U	8.0	2.7	ug/L		09/10/18 16:34	09/10/18 17:12	1
Aluminum	7.5	U	20.0	7.5	ug/L		09/10/18 16:34	09/10/18 17:12	1
Sodium	37.9	U	100	37.9	ug/L		09/10/18 16:34	09/10/18 17:12	1
Magnesium	32.9	U	100	32.9	ug/L		09/10/18 16:34	09/10/18 17:12	1
Potassium	32.5	U	100	32.5	ug/L		09/10/18 16:34	09/10/18 17:12	1
Calcium	33.8	U	100	33.8	ug/L		09/10/18 16:34	09/10/18 17:12	1
Iron	22.9	U	60.0	22.9	ug/L		09/10/18 16:34	09/10/18 17:12	1
Thallium	0.12	U	0.40	0.12	ug/L		09/10/18 16:34	09/10/18 17:12	1

Lab Sample ID: 460-163526-1 MS
Matrix: Water
Analysis Batch: 550980

Client Sample ID: RW2 (279-289)-082818
Prep Type: Dissolved
Prep Batch: 550997

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	10.0	9.64		ug/L		96	75 - 125
Arsenic	1.2	J	20.0	25.56		ug/L		122	75 - 125
Barium	109		20.0	129.3	4	ug/L		100	75 - 125
Beryllium	0.26	U	10.0	9.49		ug/L		95	75 - 125
Cadmium	0.61	U	10.0	9.96		ug/L		100	75 - 125
Cobalt	11.9		10.0	21.81		ug/L		99	75 - 125
Chromium	1.3	U	20.0	19.89		ug/L		99	75 - 125
Copper	1.9	U	20.0	19.27		ug/L		96	75 - 125
Manganese	5400		100	5542	4	ug/L		140	75 - 125
Nickel	10.6		20.0	29.74		ug/L		96	75 - 125
Lead	0.37	U	10.0	10.31		ug/L		103	75 - 125
Antimony	0.62	U	10.0	9.73		ug/L		97	75 - 125
Vanadium	1.2	U	20.0	20.34		ug/L		102	75 - 125
Zinc	5.4	U	100	103.2		ug/L		103	75 - 125
Aluminum	15.0	U	1000	1002		ug/L		100	75 - 125
Sodium	105000		1000	107100	4	ug/L		168	75 - 125
Magnesium	49300		1000	50220	4	ug/L		94	75 - 125
Potassium	7610		1000	8644	4	ug/L		103	75 - 125
Calcium	128000		1000	129900	4	ug/L		156	75 - 125
Iron	45.7	U	1000	1027		ug/L		103	75 - 125
Thallium	0.24	U	8.00	8.19		ug/L		102	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163526-1 MS
Matrix: Water
Analysis Batch: 551313

Client Sample ID: RW2 (279-289)-082818
Prep Type: Dissolved
Prep Batch: 550997

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Selenium	0.69	U	20.0	21.18		ug/L		106	75 - 125		

Lab Sample ID: 460-163526-1 DU
Matrix: Water
Analysis Batch: 550980

Client Sample ID: RW2 (279-289)-082818
Prep Type: Dissolved
Prep Batch: 550997

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Silver	1.4	U		1.4	U	ug/L				NC	20
Arsenic	1.2	J		1.26	J	ug/L				2	20
Barium	109			109.4		ug/L				0	20
Beryllium	0.26	U		0.26	U	ug/L				NC	20
Cadmium	0.61	U		0.61	U	ug/L				NC	20
Cobalt	11.9			11.94		ug/L				0.6	20
Chromium	1.3	U		1.3	U	ug/L				NC	20
Copper	1.9	U		1.9	U	ug/L				NC	20
Manganese	5400			5430		ug/L				0.5	20
Nickel	10.6			10.86		ug/L				3	20
Lead	0.37	U		0.37	U	ug/L				NC	20
Antimony	0.62	U		0.62	U	ug/L				NC	20
Selenium	0.69	U		0.69	U	ug/L				NC	20
Vanadium	1.2	U		1.2	U	ug/L				NC	20
Zinc	5.4	U		5.4	U	ug/L				NC	20
Aluminum	15.0	U		15.0	U	ug/L				NC	20
Sodium	105000			105700		ug/L				0.2	20
Magnesium	49300			49430		ug/L				0.3	20
Potassium	7610			7617		ug/L				0.08	20
Calcium	128000			128400		ug/L				0.05	20
Iron	45.7	U		45.7	U	ug/L				NC	20
Thallium	0.24	U		0.24	U	ug/L				NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 460-549715/1-A
Matrix: Water
Analysis Batch: 549810

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549715

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 04:33	09/05/18 08:54	1

Lab Sample ID: LCS 460-549715/2-A
Matrix: Water
Analysis Batch: 549810

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549715

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			1.00	0.969		ug/L		97	80 - 120		

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 460-163168-A-1-D MS
Matrix: Water
Analysis Batch: 549810

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 549715

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	1.08		ug/L		108	75 - 125

Lab Sample ID: 460-163168-A-1-C DU
Matrix: Water
Analysis Batch: 549810

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 549715

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Lab Sample ID: LCS 460-549717/2-A
Matrix: Water
Analysis Batch: 549810

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549717

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.963		ug/L		96	80 - 120

Lab Sample ID: LCS 460-549725/2-A
Matrix: Water
Analysis Batch: 549810

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549725

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.984		ug/L		98	80 - 120

Lab Sample ID: MB 460-549706/1-B
Matrix: Water
Analysis Batch: 549810

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 549717

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 05:01	09/05/18 09:37	1

Lab Sample ID: 460-163621-E-1-D MS
Matrix: Water
Analysis Batch: 549810

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 549717

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	1.01		ug/L		101	75 - 125

Lab Sample ID: 460-163621-E-1-C DU
Matrix: Water
Analysis Batch: 549810

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 549717

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Lab Sample ID: MB 460-549714/1-B
Matrix: Water
Analysis Batch: 549810

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 549725

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/05/18 05:37	09/05/18 10:31	1

Lab Sample ID: 460-163689-H-1-D MS
Matrix: Water
Analysis Batch: 549810

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 549725

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	1.00		ug/L		100	75 - 125

Lab Sample ID: 460-163689-H-1-C DU
Matrix: Water
Analysis Batch: 549810

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 549725

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 460-550322/1-A
Matrix: Water
Analysis Batch: 550403

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/07/18 08:35	09/07/18 10:56	1

Lab Sample ID: LCS 460-550322/2-A
Matrix: Water
Analysis Batch: 550403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550322

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.102		mg/L		102	85 - 115

Lab Sample ID: 460-163440-F-3-B MS
Matrix: Water
Analysis Batch: 550403

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 550322

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0020	U F2 F1	0.200	0.105	F1	mg/L		53	75 - 125

Lab Sample ID: 460-163440-F-3-C MSD
Matrix: Water
Analysis Batch: 550403

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 550322

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U F2 F1	0.200	0.195	F2	mg/L		98	75 - 125	60	20

Lab Sample ID: MB 460-550885/1-A
Matrix: Water
Analysis Batch: 550966

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 12:53	1

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LCS 460-550885/2-A
Matrix: Water
Analysis Batch: 550966

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550885

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			0.100	0.0993		mg/L		99	85 - 115		

Lab Sample ID: 460-163473-A-4-B MS
Matrix: Water
Analysis Batch: 550966

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 550885

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.0020	U	0.200	0.187		mg/L		94	75 - 125		

Lab Sample ID: 460-163473-A-4-C MSD
Matrix: Water
Analysis Batch: 550966

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 550885

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U	0.200	0.185		mg/L		93	75 - 125	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 460-548962/2
Matrix: Water
Analysis Batch: 548962

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/31/18 08:17	1
Alkalinity	5.0	U	5.0	5.0	mg/L			08/31/18 08:17	1

Lab Sample ID: LCSSRM 460-548962/3
Matrix: Water
Analysis Batch: 548962

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

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			384	364.6		mg/L		94.9	84.9 - 114.8		

Lab Sample ID: 460-163578-A-2 DU
Matrix: Water
Analysis Batch: 548962

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	281		281.5		mg/L		0.2	10
Alkalinity	281		281.5		mg/L		0.2	10

GC/MS VOA

Analysis Batch: 549219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	8260C	
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	8260C	
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	8260C	
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	8260C	
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	8260C	
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	8260C	
460-163526-9	TB-04-082918	Total/NA	Water	8260C	
MB 460-549219/8	Method Blank	Total/NA	Water	8260C	
LCS 460-549219/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-549219/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 549351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	8260C SIM	
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	8260C SIM	
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	8260C SIM	
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	8260C SIM	
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	8260C SIM	
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	8260C SIM	
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	8260C SIM	
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	8260C SIM	
460-163526-9	TB-04-082918	Total/NA	Water	8260C SIM	
MB 460-549351/9	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-549351/4	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-549351/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Analysis Batch: 549428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	8260C	
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	8260C	
MB 460-549428/8	Method Blank	Total/NA	Water	8260C	
LCS 460-549428/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-549428/5	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 548897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	3510C	
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	3510C	
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	3510C	
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	3510C	
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	3510C	
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	3510C	
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	3510C	
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	3510C	
MB 460-548897/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-548897/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-548897/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-163445-I-1-A MS	Matrix Spike	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 548897 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163445-I-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Prep Batch: 548982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	3510C	
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	3510C	
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	3510C	
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	3510C	
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	3510C	
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	3510C	
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	3510C	
MB 460-548982/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-548982/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-548982/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-548982/6-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-548982/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 460-548982/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 460-548982/7-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 548983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	3510C	
MB 460-548983/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-548983/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-548983/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-548983/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-548983/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-163528-E-1-A MS	Matrix Spike	Total/NA	Water	3510C	
460-163528-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 548987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	8270D SIM ID	548897
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	8270D SIM ID	548897
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	8270D SIM ID	548897
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	8270D SIM ID	548897
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	8270D SIM ID	548897
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	8270D SIM ID	548897
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	8270D SIM ID	548897
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	8270D SIM ID	548897
MB 460-548897/1-A	Method Blank	Total/NA	Water	8270D SIM ID	548897
LCS 460-548897/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	548897
LCSD 460-548897/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM ID	548897
460-163445-I-1-A MS	Matrix Spike	Total/NA	Water	8270D SIM ID	548897
460-163445-I-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8270D SIM ID	548897

Analysis Batch: 549086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	8270D	548982
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	8270D	548982
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	8270D	548982

GC/MS Semi VOA (Continued)

Analysis Batch: 549086 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	8270D	548982
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	8270D	548982
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	8270D	548982
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	8270D	548982
MB 460-548982/1-A	Method Blank	Total/NA	Water	8270D	548982
LCS 460-548982/2-A	Lab Control Sample	Total/NA	Water	8270D	548982
LCS 460-548982/4-A	Lab Control Sample	Total/NA	Water	8270D	548982
LCSD 460-548982/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	548982
LCSD 460-548982/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	548982

Analysis Batch: 549105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	8270D	548983
MB 460-548983/1-A	Method Blank	Total/NA	Water	8270D	548983
LCS 460-548983/2-A	Lab Control Sample	Total/NA	Water	8270D	548983
LCS 460-548983/3-A	Lab Control Sample	Total/NA	Water	8270D	548983
460-163528-E-1-A MS	Matrix Spike	Total/NA	Water	8270D	548983
460-163528-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8270D	548983

Analysis Batch: 549291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	8270D SIM	548982
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	8270D SIM	548982
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	8270D SIM	548982
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	8270D SIM	548982
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	8270D SIM	548982
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	8270D SIM	548982
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	8270D SIM	548982
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	8270D SIM	548983
MB 460-548982/1-A	Method Blank	Total/NA	Water	8270D SIM	548982
MB 460-548983/1-A	Method Blank	Total/NA	Water	8270D SIM	548983
LCS 460-548982/6-A	Lab Control Sample	Total/NA	Water	8270D SIM	548982
LCSD 460-548982/7-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	548982

Analysis Batch: 549509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-548983/4-A	Lab Control Sample	Total/NA	Water	8270D SIM	548983
LCSD 460-548983/5-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	548983

GC Semi VOA

Prep Batch: 548909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	3510C	
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	3510C	
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	3510C	
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	3510C	
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	3510C	
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	3510C	
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Prep Batch: 548909 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	3510C	
MB 460-548909/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-548909/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-548909/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 549201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	8082A	548909
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	8082A	548909
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	8082A	548909
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	8082A	548909
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	8082A	548909
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	8082A	548909
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	8082A	548909
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	8082A	548909
MB 460-548909/1-A	Method Blank	Total/NA	Water	8082A	548909
LCS 460-548909/2-A	Lab Control Sample	Total/NA	Water	8082A	548909
LCSD 460-548909/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	548909

HPLC/IC

Analysis Batch: 548709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	9056A	
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	9056A	
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	9056A	
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	9056A	
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	9056A	
MB 460-548709/33	Method Blank	Total/NA	Water	9056A	
LCS 460-548709/35	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-548709/36	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163526-4 MS	RW10A (75-85)-082818	Total/NA	Water	9056A	
460-163526-4 MSD	RW10A (75-85)-082818	Total/NA	Water	9056A	
460-163526-4 DU	RW10A (75-85)-082818	Total/NA	Water	9056A	

Analysis Batch: 548942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1 - DL	RW2 (279-289)-082818	Total/NA	Water	9056A	
460-163526-2 - DL	RW2 (252-262)-082818	Total/NA	Water	9056A	
460-163526-3 - DL	RW10A (51-61)-082818	Total/NA	Water	9056A	
460-163526-4 - DL	RW10A (75-85)-082818	Total/NA	Water	9056A	
460-163526-5 - DL	RW10 (120-130)-082818	Total/NA	Water	9056A	
460-163526-6 - DL	RW10 (185-195)-082818	Total/NA	Water	9056A	
460-163526-7 - DL	RW12 (55-65)-082918	Total/NA	Water	9056A	
MB 460-548942/3	Method Blank	Total/NA	Water	9056A	
LCS 460-548942/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-548942/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163526-4 MS - DL	RW10A (75-85)-082818	Total/NA	Water	9056A	
460-163526-4 MSD - DL	RW10A (75-85)-082818	Total/NA	Water	9056A	
460-163526-4 DU - DL	RW10A (75-85)-082818	Total/NA	Water	9056A	

Metals

Filtration Batch: 549706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Dissolved	Water	FILTRATION	
460-163526-2	RW2 (252-262)-082818	Dissolved	Water	FILTRATION	
MB 460-549706/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163621-E-1-D MS	Matrix Spike	Dissolved	Water	FILTRATION	
460-163621-E-1-C DU	Duplicate	Dissolved	Water	FILTRATION	

Filtration Batch: 549714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-3	RW10A (51-61)-082818	Dissolved	Water	FILTRATION	
460-163526-4	RW10A (75-85)-082818	Dissolved	Water	FILTRATION	
460-163526-5	RW10 (120-130)-082818	Dissolved	Water	FILTRATION	
460-163526-6	RW10 (185-195)-082818	Dissolved	Water	FILTRATION	
460-163526-7	RW12 (55-65)-082918	Dissolved	Water	FILTRATION	
460-163526-8	RW12 (130-140)-082918	Dissolved	Water	FILTRATION	
MB 460-549714/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163689-H-1-D MS	Matrix Spike	Dissolved	Water	FILTRATION	
460-163689-H-1-C DU	Duplicate	Dissolved	Water	FILTRATION	

Prep Batch: 549715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	7470A	
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	7470A	
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	7470A	
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	7470A	
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	7470A	
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	7470A	
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	7470A	
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	7470A	
MB 460-549715/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-549715/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163168-A-1-D MS	Matrix Spike	Total/NA	Water	7470A	
460-163168-A-1-C DU	Duplicate	Total/NA	Water	7470A	

Prep Batch: 549717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Dissolved	Water	7470A	549706
460-163526-2	RW2 (252-262)-082818	Dissolved	Water	7470A	549706
MB 460-549706/1-B	Method Blank	Dissolved	Water	7470A	549706
LCS 460-549717/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163621-E-1-D MS	Matrix Spike	Dissolved	Water	7470A	549706
460-163621-E-1-C DU	Duplicate	Dissolved	Water	7470A	549706

Prep Batch: 549725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-3	RW10A (51-61)-082818	Dissolved	Water	7470A	549714
460-163526-4	RW10A (75-85)-082818	Dissolved	Water	7470A	549714
460-163526-5	RW10 (120-130)-082818	Dissolved	Water	7470A	549714
460-163526-6	RW10 (185-195)-082818	Dissolved	Water	7470A	549714
460-163526-7	RW12 (55-65)-082918	Dissolved	Water	7470A	549714
460-163526-8	RW12 (130-140)-082918	Dissolved	Water	7470A	549714
MB 460-549714/1-B	Method Blank	Dissolved	Water	7470A	549714

Metals (Continued)

Prep Batch: 549725 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-549725/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163689-H-1-D MS	Matrix Spike	Dissolved	Water	7470A	549714
460-163689-H-1-C DU	Duplicate	Dissolved	Water	7470A	549714

Prep Batch: 549767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	3010A	
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	3010A	
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	3010A	
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	3010A	
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	3010A	
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	3010A	
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	3010A	
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	3010A	
MB 460-549767/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-549767/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-163433-M-2-D MS ^2	Matrix Spike	Total/NA	Water	3010A	
460-163433-M-2-D MS ^20	Matrix Spike	Total/NA	Water	3010A	
460-163433-M-2-C DU ^2	Duplicate	Total/NA	Water	3010A	
460-163433-M-2-C DU ^20	Duplicate	Total/NA	Water	3010A	

Analysis Batch: 549810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Dissolved	Water	7470A	549717
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	7470A	549715
460-163526-2	RW2 (252-262)-082818	Dissolved	Water	7470A	549717
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	7470A	549715
460-163526-3	RW10A (51-61)-082818	Dissolved	Water	7470A	549725
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	7470A	549715
460-163526-4	RW10A (75-85)-082818	Dissolved	Water	7470A	549725
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	7470A	549715
460-163526-5	RW10 (120-130)-082818	Dissolved	Water	7470A	549725
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	7470A	549715
460-163526-6	RW10 (185-195)-082818	Dissolved	Water	7470A	549725
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	7470A	549715
460-163526-7	RW12 (55-65)-082918	Dissolved	Water	7470A	549725
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	7470A	549715
460-163526-8	RW12 (130-140)-082918	Dissolved	Water	7470A	549725
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	7470A	549715
MB 460-549706/1-B	Method Blank	Dissolved	Water	7470A	549717
MB 460-549714/1-B	Method Blank	Dissolved	Water	7470A	549725
MB 460-549715/1-A	Method Blank	Total/NA	Water	7470A	549715
LCS 460-549715/2-A	Lab Control Sample	Total/NA	Water	7470A	549715
LCS 460-549717/2-A	Lab Control Sample	Total/NA	Water	7470A	549717
LCS 460-549725/2-A	Lab Control Sample	Total/NA	Water	7470A	549725
460-163168-A-1-D MS	Matrix Spike	Total/NA	Water	7470A	549715
460-163621-E-1-D MS	Matrix Spike	Dissolved	Water	7470A	549717
460-163689-H-1-D MS	Matrix Spike	Dissolved	Water	7470A	549725
460-163168-A-1-C DU	Duplicate	Total/NA	Water	7470A	549715
460-163621-E-1-C DU	Duplicate	Dissolved	Water	7470A	549717
460-163689-H-1-C DU	Duplicate	Dissolved	Water	7470A	549725

QC Association Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Filtration Batch: 549811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Dissolved	Water	FILTRATION	
460-163526-2	RW2 (252-262)-082818	Dissolved	Water	FILTRATION	
460-163526-3	RW10A (51-61)-082818	Dissolved	Water	FILTRATION	
460-163526-4	RW10A (75-85)-082818	Dissolved	Water	FILTRATION	
460-163526-5	RW10 (120-130)-082818	Dissolved	Water	FILTRATION	
460-163526-6	RW10 (185-195)-082818	Dissolved	Water	FILTRATION	
460-163526-7	RW12 (55-65)-082918	Dissolved	Water	FILTRATION	
460-163526-8	RW12 (130-140)-082918	Dissolved	Water	FILTRATION	
MB 460-549811/1-C	Method Blank	Dissolved	Water	FILTRATION	
460-163526-1 MS	RW2 (279-289)-082818	Dissolved	Water	FILTRATION	
460-163526-1 DU	RW2 (279-289)-082818	Dissolved	Water	FILTRATION	

Analysis Batch: 549850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	6020B	549767
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	6020B	549767
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	6020B	549767
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	6020B	549767
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	6020B	549767
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	6020B	549767
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	6020B	549767
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	6020B	549767
MB 460-549767/1-A ^2	Method Blank	Total/NA	Water	6020B	549767
LCS 460-549767/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	549767
460-163433-M-2-D MS ^2	Matrix Spike	Total/NA	Water	6020B	549767
460-163433-M-2-C DU ^2	Duplicate	Total/NA	Water	6020B	549767

Analysis Batch: 550229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-549767/1-A ^2	Method Blank	Total/NA	Water	6020B	549767
460-163433-M-2-D MS ^20	Matrix Spike	Total/NA	Water	6020B	549767
460-163433-M-2-C DU ^20	Duplicate	Total/NA	Water	6020B	549767

Analysis Batch: 550980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Dissolved	Water	6020B	550997
460-163526-2	RW2 (252-262)-082818	Dissolved	Water	6020B	550997
460-163526-3	RW10A (51-61)-082818	Dissolved	Water	6020B	550997
460-163526-4	RW10A (75-85)-082818	Dissolved	Water	6020B	550997
460-163526-5	RW10 (120-130)-082818	Dissolved	Water	6020B	550997
460-163526-6	RW10 (185-195)-082818	Dissolved	Water	6020B	550997
460-163526-7	RW12 (55-65)-082918	Dissolved	Water	6020B	550997
460-163526-8	RW12 (130-140)-082918	Dissolved	Water	6020B	550997
MB 460-549811/1-C	Method Blank	Dissolved	Water	6020B	550997
LCS 460-550997/2-A	Lab Control Sample	Total/NA	Water	6020B	550997
460-163526-1 MS	RW2 (279-289)-082818	Dissolved	Water	6020B	550997
460-163526-1 DU	RW2 (279-289)-082818	Dissolved	Water	6020B	550997

Prep Batch: 550997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Dissolved	Water	3010A	549811
460-163526-2	RW2 (252-262)-082818	Dissolved	Water	3010A	549811
460-163526-3	RW10A (51-61)-082818	Dissolved	Water	3010A	549811

Metals (Continued)

Prep Batch: 550997 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-4	RW10A (75-85)-082818	Dissolved	Water	3010A	549811
460-163526-5	RW10 (120-130)-082818	Dissolved	Water	3010A	549811
460-163526-6	RW10 (185-195)-082818	Dissolved	Water	3010A	549811
460-163526-7	RW12 (55-65)-082918	Dissolved	Water	3010A	549811
460-163526-8	RW12 (130-140)-082918	Dissolved	Water	3010A	549811
MB 460-549811/1-C	Method Blank	Dissolved	Water	3010A	549811
LCS 460-550997/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-163526-1 MS	RW2 (279-289)-082818	Dissolved	Water	3010A	549811
460-163526-1 DU	RW2 (279-289)-082818	Dissolved	Water	3010A	549811

Analysis Batch: 551313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1 MS	RW2 (279-289)-082818	Dissolved	Water	6020B	550997

General Chemistry

Analysis Batch: 548962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	SM 2320B	
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	SM 2320B	
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	SM 2320B	
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	SM 2320B	
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	SM 2320B	
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	SM 2320B	
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	SM 2320B	
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	SM 2320B	
MB 460-548962/2	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-548962/3	Lab Control Sample	Total/NA	Water	SM 2320B	
460-163578-A-2 DU	Duplicate	Total/NA	Water	SM 2320B	

Prep Batch: 550322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	9012B	
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	9012B	
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	9012B	
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	9012B	
MB 460-550322/1-A	Method Blank	Total/NA	Water	9012B	
LCS 460-550322/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163440-F-3-B MS	Matrix Spike	Total/NA	Water	9012B	
460-163440-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	

Analysis Batch: 550403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-1	RW2 (279-289)-082818	Total/NA	Water	9012B	550322
460-163526-2	RW2 (252-262)-082818	Total/NA	Water	9012B	550322
460-163526-3	RW10A (51-61)-082818	Total/NA	Water	9012B	550322
460-163526-4	RW10A (75-85)-082818	Total/NA	Water	9012B	550322
MB 460-550322/1-A	Method Blank	Total/NA	Water	9012B	550322
LCS 460-550322/2-A	Lab Control Sample	Total/NA	Water	9012B	550322
460-163440-F-3-B MS	Matrix Spike	Total/NA	Water	9012B	550322

General Chemistry (Continued)

Analysis Batch: 550403 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163440-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	550322

Prep Batch: 550885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	9012B	
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	9012B	
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	9012B	
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	9012B	
MB 460-550885/1-A	Method Blank	Total/NA	Water	9012B	
LCS 460-550885/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163473-A-4-B MS	Matrix Spike	Total/NA	Water	9012B	
460-163473-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	

Analysis Batch: 550966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163526-5	RW10 (120-130)-082818	Total/NA	Water	9012B	550885
460-163526-6	RW10 (185-195)-082818	Total/NA	Water	9012B	550885
460-163526-7	RW12 (55-65)-082918	Total/NA	Water	9012B	550885
460-163526-8	RW12 (130-140)-082918	Total/NA	Water	9012B	550885
MB 460-550885/1-A	Method Blank	Total/NA	Water	9012B	550885
LCS 460-550885/2-A	Lab Control Sample	Total/NA	Water	9012B	550885
460-163473-A-4-B MS	Matrix Spike	Total/NA	Water	9012B	550885
460-163473-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	550885

Client Sample ID: RW2 (279-289)-082818

Lab Sample ID: 460-163526-1

Date Collected: 08/28/18 10:50

Matrix: Water

Date Received: 08/29/18 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549219	09/01/18 19:45	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	549351	09/02/18 15:43	EMM	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549086	09/01/18 05:43	SK	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549291	09/02/18 05:02	SK	TAL EDI
Total/NA	Prep	3510C			548897	08/31/18 09:08	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548987	08/31/18 16:37	SK	TAL EDI
Total/NA	Prep	3510C			548909	08/31/18 09:38	SXG	TAL EDI
Total/NA	Analysis	8082A		1	549201	09/01/18 20:24	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	548709	08/30/18 22:22	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	2	548942	08/31/18 09:27	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549811	09/05/18 11:56	MDC	TAL EDI
Dissolved	Prep	3010A			550997	09/10/18 16:34	PHP	TAL EDI
Dissolved	Analysis	6020B		2	550980	09/10/18 17:25	PHP	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 03:48	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			549706	09/05/18 03:34	TJS	TAL EDI
Dissolved	Prep	7470A			549717	09/05/18 05:01	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549810	09/05/18 10:24	TJS	TAL EDI
Total/NA	Prep	7470A			549715	09/05/18 04:33	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549810	09/05/18 09:15	TJS	TAL EDI
Total/NA	Prep	9012B			550322	09/07/18 08:35	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550403	09/07/18 11:22	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548962	08/31/18 10:50	PHM	TAL EDI

Client Sample ID: RW2 (252-262)-082818

Lab Sample ID: 460-163526-2

Date Collected: 08/28/18 11:30

Matrix: Water

Date Received: 08/29/18 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549428	09/03/18 01:10	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	549351	09/02/18 16:08	EMM	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549086	09/01/18 06:04	SK	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549291	09/02/18 05:24	SK	TAL EDI
Total/NA	Prep	3510C			548897	08/31/18 09:08	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548987	08/31/18 16:55	SK	TAL EDI
Total/NA	Prep	3510C			548909	08/31/18 09:38	SXG	TAL EDI
Total/NA	Analysis	8082A		1	549201	09/01/18 20:39	JXZ	TAL EDI
Total/NA	Analysis	9056A	DL	100	548942	08/31/18 09:40	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549811	09/05/18 11:56	MDC	TAL EDI

Client Sample ID: RW2 (252-262)-082818

Lab Sample ID: 460-163526-2

Date Collected: 08/28/18 11:30

Matrix: Water

Date Received: 08/29/18 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			550997	09/10/18 16:34	PHP	TAL EDI
Dissolved	Analysis	6020B		2	550980	09/10/18 17:33	PHP	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 03:51	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			549706	09/05/18 03:34	TJS	TAL EDI
Dissolved	Prep	7470A			549717	09/05/18 05:01	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549810	09/05/18 10:29	TJS	TAL EDI
Total/NA	Prep	7470A			549715	09/05/18 04:33	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549810	09/05/18 09:17	TJS	TAL EDI
Total/NA	Prep	9012B			550322	09/07/18 08:35	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550403	09/07/18 11:23	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548962	08/31/18 09:11	PHM	TAL EDI

Client Sample ID: RW10A (51-61)-082818

Lab Sample ID: 460-163526-3

Date Collected: 08/28/18 13:00

Matrix: Water

Date Received: 08/29/18 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549428	09/03/18 01:34	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	549351	09/02/18 16:33	EMM	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549086	09/01/18 06:25	SK	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549291	09/02/18 05:45	SK	TAL EDI
Total/NA	Prep	3510C			548897	08/31/18 09:08	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548987	08/31/18 17:13	SK	TAL EDI
Total/NA	Prep	3510C			548909	08/31/18 09:38	SXG	TAL EDI
Total/NA	Analysis	8082A		1	549201	09/01/18 20:55	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	548709	08/30/18 23:15	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	3	548942	08/31/18 09:54	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549811	09/05/18 12:07	MDC	TAL EDI
Dissolved	Prep	3010A			550997	09/10/18 16:34	PHP	TAL EDI
Dissolved	Analysis	6020B		2	550980	09/10/18 17:44	PHP	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 03:54	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			549714	09/05/18 04:20	TJS	TAL EDI
Dissolved	Prep	7470A			549725	09/05/18 05:37	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549810	09/05/18 10:45	TJS	TAL EDI
Total/NA	Prep	7470A			549715	09/05/18 04:33	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549810	09/05/18 09:19	TJS	TAL EDI
Total/NA	Prep	9012B			550322	09/07/18 08:35	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550403	09/07/18 11:24	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548962	08/31/18 10:39	PHM	TAL EDI

Client Sample ID: RW10A (75-85)-082818

Lab Sample ID: 460-163526-4

Date Collected: 08/28/18 13:20

Matrix: Water

Date Received: 08/29/18 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549219	09/01/18 20:08	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	549351	09/02/18 16:58	EMM	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549086	09/01/18 06:46	SK	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549291	09/02/18 06:06	SK	TAL EDI
Total/NA	Prep	3510C			548897	08/31/18 09:08	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548987	08/31/18 17:31	SK	TAL EDI
Total/NA	Prep	3510C			548909	08/31/18 09:38	SXG	TAL EDI
Total/NA	Analysis	8082A		1	549201	09/01/18 21:11	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	548709	08/30/18 23:41	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	3	548942	08/31/18 10:09	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549811	09/05/18 12:07	MDC	TAL EDI
Dissolved	Prep	3010A			550997	09/10/18 16:34	PHP	TAL EDI
Dissolved	Analysis	6020B		2	550980	09/10/18 17:47	PHP	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 03:57	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			549714	09/05/18 04:20	TJS	TAL EDI
Dissolved	Prep	7470A			549725	09/05/18 05:37	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549810	09/05/18 10:50	TJS	TAL EDI
Total/NA	Prep	7470A			549715	09/05/18 04:33	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549810	09/05/18 09:20	TJS	TAL EDI
Total/NA	Prep	9012B			550322	09/07/18 08:35	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550403	09/07/18 11:25	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548962	08/31/18 09:54	PHM	TAL EDI

Client Sample ID: RW10 (120-130)-082818

Lab Sample ID: 460-163526-5

Date Collected: 08/28/18 14:20

Matrix: Water

Date Received: 08/29/18 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549219	09/01/18 20:31	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	549351	09/02/18 17:23	EMM	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549086	09/01/18 07:07	SK	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549291	09/02/18 06:27	SK	TAL EDI
Total/NA	Prep	3510C			548897	08/31/18 09:08	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548987	08/31/18 17:48	SK	TAL EDI
Total/NA	Prep	3510C			548909	08/31/18 09:38	SXG	TAL EDI
Total/NA	Analysis	8082A		1	549201	09/01/18 21:27	JXZ	TAL EDI
Total/NA	Analysis	9056A	DL	10	548942	08/31/18 12:05	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549811	09/05/18 12:07	MDC	TAL EDI

Client Sample ID: RW10 (120-130)-082818

Lab Sample ID: 460-163526-5

Date Collected: 08/28/18 14:20

Matrix: Water

Date Received: 08/29/18 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			550997	09/10/18 16:34	PHP	TAL EDI
Dissolved	Analysis	6020B		2	550980	09/10/18 17:52	PHP	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 03:59	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			549714	09/05/18 04:20	TJS	TAL EDI
Dissolved	Prep	7470A			549725	09/05/18 05:37	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549810	09/05/18 10:52	TJS	TAL EDI
Total/NA	Prep	7470A			549715	09/05/18 04:33	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549810	09/05/18 09:22	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 12:57	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548962	08/31/18 09:02	PHM	TAL EDI

Client Sample ID: RW10 (185-195)-082818

Lab Sample ID: 460-163526-6

Date Collected: 08/28/18 14:35

Matrix: Water

Date Received: 08/29/18 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549219	09/01/18 20:55	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	549351	09/02/18 17:49	EMM	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549086	09/01/18 07:28	SK	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549291	09/02/18 06:48	SK	TAL EDI
Total/NA	Prep	3510C			548897	08/31/18 09:08	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548987	08/31/18 18:06	SK	TAL EDI
Total/NA	Prep	3510C			548909	08/31/18 09:38	SXG	TAL EDI
Total/NA	Analysis	8082A		1	549201	09/01/18 21:43	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	548709	08/31/18 01:12	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL	8	548942	08/31/18 12:19	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549811	09/05/18 12:07	MDC	TAL EDI
Dissolved	Prep	3010A			550997	09/10/18 16:34	PHP	TAL EDI
Dissolved	Analysis	6020B		2	550980	09/10/18 17:55	PHP	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 04:02	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			549714	09/05/18 04:20	TJS	TAL EDI
Dissolved	Prep	7470A			549725	09/05/18 05:37	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549810	09/05/18 10:53	TJS	TAL EDI
Total/NA	Prep	7470A			549715	09/05/18 04:33	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549810	09/05/18 09:27	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 12:58	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548962	08/31/18 08:53	PHM	TAL EDI

Client Sample ID: RW12 (55-65)-082918

Lab Sample ID: 460-163526-7

Date Collected: 08/29/18 08:50

Matrix: Water

Date Received: 08/29/18 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549219	09/01/18 21:18	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	549351	09/02/18 18:14	EMM	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549086	09/01/18 07:48	SK	TAL EDI
Total/NA	Prep	3510C			548982	08/31/18 14:26	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549291	09/02/18 07:10	SK	TAL EDI
Total/NA	Prep	3510C			548897	08/31/18 09:08	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548987	08/31/18 18:24	SK	TAL EDI
Total/NA	Prep	3510C			548909	08/31/18 09:38	SXG	TAL EDI
Total/NA	Analysis	8082A		1	549201	09/01/18 21:59	JXZ	TAL EDI
Total/NA	Analysis	9056A	DL	19	548942	08/31/18 12:32	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549811	09/05/18 12:10	MDC	TAL EDI
Dissolved	Prep	3010A			550997	09/10/18 16:34	PHP	TAL EDI
Dissolved	Analysis	6020B		2	550980	09/10/18 17:58	PHP	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 04:04	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			549714	09/05/18 04:20	TJS	TAL EDI
Dissolved	Prep	7470A			549725	09/05/18 05:37	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549810	09/05/18 10:55	TJS	TAL EDI
Total/NA	Prep	7470A			549715	09/05/18 04:33	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549810	09/05/18 09:29	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 12:59	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548962	08/31/18 09:21	PHM	TAL EDI

Client Sample ID: RW12 (130-140)-082918

Lab Sample ID: 460-163526-8

Date Collected: 08/29/18 09:40

Matrix: Water

Date Received: 08/29/18 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549219	09/01/18 21:41	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	549351	09/02/18 18:39	EMM	TAL EDI
Total/NA	Prep	3510C			548983	08/31/18 14:35	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549105	09/01/18 07:03	SK	TAL EDI
Total/NA	Prep	3510C			548983	08/31/18 14:35	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549291	09/02/18 08:34	SK	TAL EDI
Total/NA	Prep	3510C			548897	08/31/18 09:08	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	548987	08/31/18 18:42	SK	TAL EDI
Total/NA	Prep	3510C			548909	08/31/18 09:38	SXG	TAL EDI
Total/NA	Analysis	8082A		1	549201	09/01/18 22:15	JXZ	TAL EDI
Total/NA	Analysis	9056A		1	548709	08/31/18 02:04	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			549811	09/05/18 12:10	MDC	TAL EDI
Dissolved	Prep	3010A			550997	09/10/18 16:34	PHP	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Client Sample ID: RW12 (130-140)-082918

Date Collected: 08/29/18 09:40
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020B		2	550980	09/10/18 18:03	PHP	TAL EDI
Total/NA	Prep	3010A			549767	09/05/18 08:58	QZY	TAL EDI
Total/NA	Analysis	6020B		2	549850	09/06/18 04:07	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			549714	09/05/18 04:20	TJS	TAL EDI
Dissolved	Prep	7470A			549725	09/05/18 05:37	TJS	TAL EDI
Dissolved	Analysis	7470A		1	549810	09/05/18 10:57	TJS	TAL EDI
Total/NA	Prep	7470A			549715	09/05/18 04:33	TJS	TAL EDI
Total/NA	Analysis	7470A		1	549810	09/05/18 09:31	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:03	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	548962	08/31/18 09:30	PHM	TAL EDI

Client Sample ID: TB-04-082918

Date Collected: 08/29/18 00:00
Date Received: 08/29/18 14:10

Lab Sample ID: 460-163526-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549219	09/01/18 19:21	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	549351	09/02/18 12:20	EMM	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	12028	06-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	Ethylene Dibromide
8270D SIM	3510C	Water	Bis(2-chloroethyl)ether
9056A		Water	Chloride
9056A		Water	Sulfate

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL EDI
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
9056A	Anions, Ion Chromatography	SW846	TAL EDI
6020B	Metals (ICP/MS)	SW846	TAL EDI
7470A	Mercury (CVAA)	SW846	TAL EDI
9012B	Cyanide, Total andor Amenable	SW846	TAL EDI
SM 2320B	Alkalinity	SM	TAL EDI
3010A	Preparation, Total Metals	SW846	TAL EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI
7470A	Preparation, Mercury	SW846	TAL EDI
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL EDI
FILTRATION	Sample Filtration	None	TAL EDI

Protocol References:

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163526-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-163526-1	RW2 (279-289)-082818	Water	08/28/18 10:50	08/29/18 14:10
460-163526-2	RW2 (252-262)-082818	Water	08/28/18 11:30	08/29/18 14:10
460-163526-3	RW10A (51-61)-082818	Water	08/28/18 13:00	08/29/18 14:10
460-163526-4	RW10A (75-85)-082818	Water	08/28/18 13:20	08/29/18 14:10
460-163526-5	RW10 (120-130)-082818	Water	08/28/18 14:20	08/29/18 14:10
460-163526-6	RW10 (185-195)-082818	Water	08/28/18 14:35	08/29/18 14:10
460-163526-7	RW12 (55-65)-082918	Water	08/29/18 08:50	08/29/18 14:10
460-163526-8	RW12 (130-140)-082918	Water	08/29/18 09:40	08/29/18 14:10
460-163526-9	TB-04-082918	Water	08/29/18 00:00	08/29/18 14:10

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

w Durham Road
, New Jersey 08817
(732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / A

460-163526 Chain of Custody

9/13/2018

Name (for report and invoice): Tim Roeper	Samplers Name (Printed): Dan Wheeler	Site/Project Identification: Ringwood
Company: Cornerstone Environmental Group	P. O. #: 180361-006	State (Location of site): NJ: X NY: Other:
		Regulatory Program: DKQP:
Address: 100 Crystal Run Rd, suite 101	Analysis Turnaround Time: Standard X	
City: Middletown State: NY 10941	Rush Charges Authorized For: 2 Week / 1 Week / Other	
Phone: 845-695-0200 Fax:		

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs + 15 TICs w/ SIM	TCL BNA/SVOCs w/ SIM	1,4 Dioxane by Isotope Dilution	PCB's	Chloride	Sulfate	Alkalinity	TAL Metals	Dissolved TAL Metals	Total Cyanide	Sample Numbers
RW2(279-289)-082818	8.28.18	10:50	GW	15	X	X	X	X	X	X	X	X	X	X	1
RW2(252-262)-082818	8.28.18	11:30	GW	15	X	X	X	X	X	X	X	X	X	X	2
RW10A(51-61)-082818	8.28.18	13:00	GW	15	X	X	X	X	X	X	X	X	X	X	3
RW10A(75-85)-082818	8.28.18	13:20	GW	15	X	X	X	X	X	X	X	X	X	X	4
RW10(120-130)-082818	8.28.18	14:20	GW	15	X	X	X	X	X	X	X	X	X	X	5
RW10(185-195)-082818	8.28.18	14:35	GW	15	X	X	X	X	X	X	X	X	X	X	6
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH; 6 = Other _____, 7 = Other _____				Soil:											
				Water:	2	1	1	1	1	1	1	4	1	5	

LAB USE ONLY
Project No:
Job No: 163526

Special Instructions

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	CORNERSTONE	8/29/18 0900	1) TIM YAP	TA EDISON
2) TIM YAP	TA EDISON	8/29/18 1410	2) Kelly Oa	TA Edi
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

IR # 9

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

9/13/2018

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CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Tim Roeper	Samplers Name (Printed): Dan Wheeler	Site/Project Identification: Ringwood
Company: Cornerstone Environmental Group	P. O. #: 180361-006	State (Location of site): NJ: X NY: Other:
		Regulatory Program: DKQP:
Address: 100 Crystal Run Rd, Suite 101	Analysis Turnaround Time: Standard X	
City: Middletown State: NY 10941	Rush Charges Authorized For: 2 Week / 1 Week / Other	
Phone: 845-695-0200 Fax:		

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs + 15 TICs w/ SIM	TCL BNA/SVOCs w/ SIM	1,4 Dioxane by Isotope Dilution	PCB's	Chloride	Sulfate	Alkalinity	TAL Metals	TAL Metals Dissolved	Total Cyanide	Sample Numbers
RW 12 (55-65) - 082918	8/29/18	8:50	GW	15	x	x	x	x	x	x	x	x	x	x	7
RW 12 (130-140) - 082918	8/29/18	0940	GW	15	x	x	x	x	x	x	x	x	x	x	8
TB-04-082918	8/29/18	-	BW	2	x										9

LAB USE ONLY
Project No:
Job No: 163626

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other _____, 7 = Other _____

Soil:															
Water:	2	1	1	1	1	1	1	4	1	5					

Special Instructions: * No Preservative (HCl) in trip blank 04

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
Daniel Wheeler	Cornerstone	8/29/18 10 25	1) Tim Yap	TA EDISON
2) Tim Yap	TA EDISON	8/29/18 1410	2) Kelly Jo	TAGel
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

IR # 9 0.9 °C 1.0 °C 1.2 °C NOCS

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 163512C

Number of Coolers: 3 IR Gun #: 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	0.9 °C	0.9 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	1.0 °C	1.0 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	1.2 °C	1.2 °C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1				<2								7.2			
2				<2								7.2			
3				<2								7.2			
4				<2								7.2			
5				<2								7.2			
6				<2								7.2			
7				<2								7.2			
8				<2								7.2			

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: TY Date: 8/29/18

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 460-163526-1

Login Number: 163526
List Number: 1
Creator: Meyers, Gary

List Source: TestAmerica Edison

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

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-163634-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Dr. Tim Roeper

Authorized for release by:
9/14/2018 8:38:16 AM

Marie Meidhof, Senior Project Manager
(732)549-3900
marie.meidhof@testamericainc.com

LINKS

Review your project results through TotalAccess

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

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits
E	Result exceeded calibration range.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-163634-1

Laboratory: TestAmerica Edison

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 460-163634-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 8/30/2018 3:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.6º C and 2.8º C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3), RW9(206-216)-082918 (460-163634-4) and TB-05-083018 (460-163634-5) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C DKQP. The samples were analyzed on 09/02/2018 and 09/03/2018.

The continuing calibration verification (CCV) analyzed in batch 460-549256 was outside the method criteria for the following analytes: Chloroethane, Dichlorodifluoromethane, Trichlorofluoromethane and Bromomethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The CCV analyzed in batch 460-549424 was outside the method criteria for the following analytes: 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene and 2-Methyl-2-propanol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes are considered estimated.

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 460-549256 recovered outside control limits (low) for Bromomethane.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

Job ID: 460-163634-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) DKQP

Samples RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3) and RW9(206-216)-082918 (460-163634-4) were analyzed for Semivolatile organic compounds (GC/MS) DKQP in accordance with EPA SW-846 Method 8270D DKQP. The samples were prepared on 08/31/2018 and analyzed on 09/02/2018.

The CCV analyzed in batch 460-549280 was outside the method criteria for the following analytes: Benzo[g,h,i]perylene and Di-n-octyl phthalate. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The laboratory control sample (LCS) for preparation batch 460-549018 and analytical batch 460-549280 recovered outside control limits for the following analyte: Atrazine. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

The LCS associated with preparation batch 460-549018 and analytical batch 460-549280 was outside DKQP recovery criteria (low) but within laboratory generated limits for the following analytes: 2,2'-oxybis[1-chloropropane]. The data has been reported.

2,4,6-Tribromophenol (Surr) failed the surrogate recovery criteria high for RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3), RW9(206-216)-082918 (460-163634-4), MB 460-549018/1-A, LCS 460-549018/2-A, LCS 460-549018/4-A, 460-163445-J-1-A MS, and 460-163445-H-1-A MSD.

Several analytes failed the recovery criteria low for the MSD of sample 460-163445-1 in batch 460-549280. Atrazine exceeded the RPD limit.

Several analytes failed the recovery criteria low for the MS of sample 460-163445-1 in batch 460-549280. Di-n-octyl phthalate failed the recovery criteria high.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM)

Samples RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3) and RW9(206-216)-082918 (460-163634-4) were analyzed for semivolatile organic compounds - Selected Ion Mode (SIM) in accordance with EPA Method 8270C SIM DKQP. The samples were prepared on 08/31/2018 and analyzed on 09/02/2018.

The CCV analyzed in batch 460-549294 was outside the method criteria for the following analytes: Benzo[a]anthracene and Dibenz(a,h)anthracene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The CCV associated with batch 460-549294 recovered above the upper control limit for Dibenz(a,h)anthracene and Indeno[1,2,3-cd]pyrene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Dibenz(a,h)anthracene and Indeno[1,2,3-cd]pyrene failed the recovery criteria high for LCS 460-549018/6-A and LCSD 460-549018/7-A.

Refer to the QC report for details.

Job ID: 460-163634-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

1,4 DIOXANE BY 8270D SIM, ISOTOPE DILUTION

Samples RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3) and RW9(206-216)-082918 (460-163634-4) were analyzed for 1,4 Dioxane by 8270D SIM, Isotope Dilution in accordance with EPA SW-846 Method 8270D SIM. The samples were prepared and analyzed on 09/01/2018.

No difficulties were encountered during the 1,4 Dioxane analysis.

All quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS) - SELECTED ION MODE (SIM) DKQP

Samples RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3), RW9(206-216)-082918 (460-163634-4) and TB-05-083018 (460-163634-5) were analyzed for volatile organic compounds (GC-MS) - Selected Ion Mode (SIM) DKQP in accordance with EPA SW-846 Method 8260C SIM DKQP. The samples were analyzed on 09/07/2018.

The continuing calibration verification (CCV) analyzed in batch 460-550312 was outside the method criteria for the following analytes: 1,2-Dibromo-3-Chloropropane (bias high) and Ethylene Dibromide (bias low). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

1,2,3-Trichloropropane was detected in method blank MB 460-550312/9 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No other difficulties were encountered during the VOA SIM DKQP analysis.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS) DKQP

Samples RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3) and RW9(206-216)-082918 (460-163634-4) were analyzed for polychlorinated biphenyls (PCBs) DKQP in accordance with EPA SW-846 Method 8082A DKQP. The samples were prepared on 09/04/2018 and analyzed on 09/05/2018.

The following sample required a copper clean-up to reduce matrix interferences caused by sulfur: RW 8 (204-214)-082918 (460-163634-2).

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICP/MS)

Samples RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3) and RW9(206-216)-082918 (460-163634-4) were analyzed for Dissolved Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared and analyzed on 09/12/2018.

Beryllium exceeded the RPD limit for the duplicate of sample 460-163597-2.

Refer to the QC report for details.

Job ID: 460-163634-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Samples RW8(163-173)-082918 (460-163634-1)[2X], RW8(204-214)-082918 (460-163634-2)[2X], RW9A(85-95)-082918 (460-163634-3)[2X] and RW9(206-216)-082918 (460-163634-4)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Dissolved Metals analysis.

All other quality control parameters were within the acceptance limits.

METALS (ICP/MS)

Samples RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3) and RW9(206-216)-082918 (460-163634-4) were analyzed for Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared on 09/09/2018 and analyzed on 09/10/2018.

Sodium failed the recovery criteria low for the MS of sample 460-164076-1 in batch 460-550921. Aluminum and Copper exceeded the RPD limit for the duplicate of sample 460-164076-1.

Refer to the QC report for details.

No other difficulties were encountered during the Metals DKQP analysis.

All other quality control parameters were within the acceptance limits.

MERCURY DKQP

Samples RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3) and RW9(206-216)-082918 (460-163634-4) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 09/06/2018.

No difficulties were encountered during the dissolved Hg analysis.

All quality control parameters were within the acceptance limits.

MERCURY DKQP

Samples RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3) and RW9(206-216)-082918 (460-163634-4) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 09/06/2018.

No difficulties were encountered during the Hg analysis.

All quality control parameters were within the acceptance limits.

ANIONS

Samples RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3) and RW9(206-216)-082918 (460-163634-4) were analyzed for anions in accordance with EPA SW-846 Method 9056. The samples were analyzed on 08/31/2018 and 09/02/2018.

Chloride and Sulfate failed the recovery criteria low for the matrix spike (MS) and matrix spike duplicate (MSD) of sample RW8(163-173)-082918 (460-163634-1) in batch 460-549198.

Refer to the QC report for details.

Samples RW8(163-173)-082918 (460-163634-1)[10X], RW8(204-214)-082918 (460-163634-2)[20X], RW9(206-216)-082918 (460-163634-4)[40X] and RW9(206-216)-082918 (460-163634-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the anions analysis.

Job ID: 460-163634-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

All other quality control parameters were within the acceptance limits.

ALKALINITY

Samples RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3) and RW9(206-216)-082918 (460-163634-4) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 09/04/2018.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

TOTAL CYANIDE

Samples RW8(163-173)-082918 (460-163634-1), RW8(204-214)-082918 (460-163634-2), RW9A(85-95)-082918 (460-163634-3) and RW9(206-216)-082918 (460-163634-4) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B (DKQP). The samples were prepared and analyzed on 09/10/2018.

No difficulties were encountered during the cyanide analysis.

All quality control parameters were within the acceptance limits.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Client Sample ID: RW8(163-173)-082918 — Lab Sample ID: 460-163634-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.4		1.0	0.43	ug/L	1		8260C	Total/NA
Toluene	0.81	J	1.0	0.38	ug/L	1		8260C	Total/NA
Chloride - DL	5.90	D F1	1.20	0.78	mg/L	10		9056A	Total/NA
Sulfate - DL	110	D	6.00	3.32	mg/L	10		9056A	Total/NA
Arsenic	1.8	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	9.2		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	14.2		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	7.7		4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	0.96	J	2.0	0.62	ug/L	2		6020B	Total/NA
Sodium	46100		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	6610		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1990		200	64.9	ug/L	2		6020B	Total/NA
Calcium	31900		200	67.6	ug/L	2		6020B	Total/NA
Iron	77.1	J	120	45.7	ug/L	2		6020B	Total/NA
Arsenic	1.1	J	2.0	0.77	ug/L	2		6020B	Dissolved
Barium	8.5		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	16.4		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	4.4		4.0	1.3	ug/L	2		6020B	Dissolved
Sodium	44400		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	6940		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1980		200	64.9	ug/L	2		6020B	Dissolved
Calcium	33000		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	76.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	76.6		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW8(204-214)-082918 — Lab Sample ID: 460-163634-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	5.1		5.0	1.9	ug/L	1		8260C	Total/NA
Acetone	5.3		5.0	5.0	ug/L	1		8260C	Total/NA
Benzene	2.8		1.0	0.43	ug/L	1		8260C	Total/NA
Carbon disulfide	1.1		1.0	0.16	ug/L	1		8260C	Total/NA
Methylene Chloride	0.35	J	1.0	0.32	ug/L	1		8260C	Total/NA
Toluene	0.39	J	1.0	0.38	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.44		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Phenol	0.65	J	10	0.29	ug/L	1		8270D	Total/NA
Chloride - DL	47.1	D	2.40	1.56	mg/L	20		9056A	Total/NA
Sulfate - DL	102	D	12.0	6.64	mg/L	20		9056A	Total/NA
Arsenic	1.8	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	15.7		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	3.5	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	4.3		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	109		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	6.9		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	2.1		1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	1.1	J	2.0	0.62	ug/L	2		6020B	Total/NA
Zinc	46.1		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	20.6	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	89800		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	15400		200	65.7	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Client Sample ID: RW8(204-214)-082918 (Continued) — Lab Sample ID: 460-163634-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	51300		200	64.9	ug/L	2		6020B	Total/NA
Calcium	36300		200	67.6	ug/L	2		6020B	Total/NA
Iron	353		120	45.7	ug/L	2		6020B	Total/NA
Arsenic	1.7	J	2.0	0.77	ug/L	2		6020B	Dissolved
Barium	16.4		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	88.0		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	8.4		4.0	1.3	ug/L	2		6020B	Dissolved
Sodium	92000		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	17200		200	65.7	ug/L	2		6020B	Dissolved
Potassium	46800		200	64.9	ug/L	2		6020B	Dissolved
Calcium	36900		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	205		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	216		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW9A(85-95)-082918 — Lab Sample ID: 460-163634-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	1.0		1.0	0.16	ug/L	1		8260C	Total/NA
Chloride	1.70		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	11.9		0.60	0.33	mg/L	1		9056A	Total/NA
Arsenic	2.6		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	10.0		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	34.6		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	6.3		4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	1.4	J	2.0	0.62	ug/L	2		6020B	Total/NA
Zinc	9.4	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	37.6	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	4940		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	5800		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2020		200	64.9	ug/L	2		6020B	Total/NA
Calcium	23900		200	67.6	ug/L	2		6020B	Total/NA
Iron	258		120	45.7	ug/L	2		6020B	Total/NA
Arsenic	2.6		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	9.2		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	30.5		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	13.9		4.0	1.3	ug/L	2		6020B	Dissolved
Sodium	4680		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	5530		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1930		200	64.9	ug/L	2		6020B	Dissolved
Calcium	23000		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	77.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	77.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW9(206-216)-082918 — Lab Sample ID: 460-163634-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.6		5.0	5.0	ug/L	1		8260C	Total/NA
Carbon disulfide	5.8		1.0	0.16	ug/L	1		8260C	Total/NA
Methylene Chloride	0.41	J	1.0	0.32	ug/L	1		8260C	Total/NA
Toluene	1.1		1.0	0.38	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW9(206-216)-082918 (Continued)

Lab Sample ID: 460-163634-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride - DL	7.46	D	0.60	0.39	mg/L	5		9056A	Total/NA
Sulfate - DL2	377	D	24.0	13.3	mg/L	40		9056A	Total/NA
Arsenic	2.5		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	52.3		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	7.8		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	177		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	1.4	J	2.0	0.62	ug/L	2		6020B	Total/NA
Zinc	8.9	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	224		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	145000		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	16600		200	65.7	ug/L	2		6020B	Total/NA
Potassium	14300		200	64.9	ug/L	2		6020B	Total/NA
Calcium	71100		200	67.6	ug/L	2		6020B	Total/NA
Iron	278		120	45.7	ug/L	2		6020B	Total/NA
Arsenic	2.2		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	62.6		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	86.6		8.0	2.7	ug/L	2		6020B	Dissolved
Aluminum	178		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	152000		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	17000		200	65.7	ug/L	2		6020B	Dissolved
Potassium	18100		200	64.9	ug/L	2		6020B	Dissolved
Calcium	65300		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	101		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	125		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: TB-05-083018

Lab Sample ID: 460-163634-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Client Sample ID: RW8(163-173)-082918
Date Collected: 08/29/18 11:00
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/07/18 21:50	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/07/18 21:50	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/07/18 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*70 - 130*		*09/07/18 21:50*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/02/18 05:51	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/02/18 05:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/02/18 05:51	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/02/18 05:51	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/02/18 05:51	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/02/18 05:51	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/02/18 05:51	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/02/18 05:51	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/02/18 05:51	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/02/18 05:51	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/02/18 05:51	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/02/18 05:51	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/02/18 05:51	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/02/18 05:51	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/02/18 05:51	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/02/18 05:51	1
Acetone	5.0	U	5.0	5.0	ug/L			09/02/18 05:51	1
Benzene	**1.4**		1.0	0.43	ug/L			09/02/18 05:51	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/02/18 05:51	1
Bromomethane	1.0	U *	1.0	1.0	ug/L			09/02/18 05:51	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/02/18 05:51	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/02/18 05:51	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/02/18 05:51	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/02/18 05:51	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/02/18 05:51	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/02/18 05:51	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/02/18 05:51	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/02/18 05:51	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/02/18 05:51	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/02/18 05:51	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/02/18 05:51	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/02/18 05:51	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/02/18 05:51	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/02/18 05:51	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/02/18 05:51	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/02/18 05:51	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/02/18 05:51	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/02/18 05:51	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/02/18 05:51	1
Styrene	0.42	U	1.0	0.42	ug/L			09/02/18 05:51	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/02/18 05:51	1

Client Sample ID: RW8(163-173)-082918
Date Collected: 08/29/18 11:00
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.81	J	1.0	0.38	ug/L			09/02/18 05:51	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/02/18 05:51	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/02/18 05:51	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/02/18 05:51	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/02/18 05:51	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/02/18 05:51	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/02/18 05:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/02/18 05:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/02/18 05:51*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*09/02/18 05:51*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/02/18 05:51*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/02/18 05:51*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/01/18 09:58	09/01/18 21:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*27*		*10 - 150*	*09/01/18 09:58*	*09/01/18 21:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 17:11	09/02/18 03:44	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 17:11	09/02/18 03:44	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 17:11	09/02/18 03:44	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 17:11	09/02/18 03:44	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/31/18 17:11	09/02/18 03:44	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/31/18 17:11	09/02/18 03:44	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/31/18 17:11	09/02/18 03:44	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 17:11	09/02/18 03:44	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/31/18 17:11	09/02/18 03:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/31/18 17:11	09/02/18 06:43	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/31/18 17:11	09/02/18 06:43	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/31/18 17:11	09/02/18 06:43	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/02/18 06:43	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/02/18 06:43	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/02/18 06:43	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 17:11	09/02/18 06:43	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 17:11	09/02/18 06:43	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 17:11	09/02/18 06:43	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 17:11	09/02/18 06:43	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 17:11	09/02/18 06:43	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/31/18 17:11	09/02/18 06:43	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 17:11	09/02/18 06:43	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Client Sample ID: RW8(163-173)-082918
Date Collected: 08/29/18 11:00
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 17:11	09/02/18 06:43	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 17:11	09/02/18 06:43	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 17:11	09/02/18 06:43	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 17:11	09/02/18 06:43	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 06:43	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 17:11	09/02/18 06:43	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/31/18 17:11	09/02/18 06:43	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 06:43	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 17:11	09/02/18 06:43	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/02/18 06:43	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 17:11	09/02/18 06:43	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 17:11	09/02/18 06:43	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 17:11	09/02/18 06:43	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 17:11	09/02/18 06:43	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 17:11	09/02/18 06:43	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 06:43	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 06:43	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 17:11	09/02/18 06:43	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 17:11	09/02/18 06:43	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 17:11	09/02/18 06:43	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 17:11	09/02/18 06:43	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 17:11	09/02/18 06:43	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 17:11	09/02/18 06:43	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/02/18 06:43	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 17:11	09/02/18 06:43	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 17:11	09/02/18 06:43	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 17:11	09/02/18 06:43	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 17:11	09/02/18 06:43	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 17:11	09/02/18 06:43	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 17:11	09/02/18 06:43	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 17:11	09/02/18 06:43	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 17:11	09/02/18 06:43	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 17:11	09/02/18 06:43	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 17:11	09/02/18 06:43	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 17:11	09/02/18 06:43	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 17:11	09/02/18 06:43	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/02/18 06:43	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 17:11	09/02/18 06:43	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 17:11	09/02/18 06:43	1
Caprolactam	0.68	U	10	0.68	ug/L		08/31/18 17:11	09/02/18 06:43	1
Atrazine	1.3	U *	2.0	1.3	ug/L		08/31/18 17:11	09/02/18 06:43	1
2,2'-oxybis[1-chloropropane]	0.63	U *	10	0.63	ug/L		08/31/18 17:11	09/02/18 06:43	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/02/18 06:43	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/02/18 06:43	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 17:11	09/02/18 06:43	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/02/18 06:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/31/18 17:11*	*09/02/18 06:43*	*1*

Client Sample ID: RW8(163-173)-082918
Date Collected: 08/29/18 11:00
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*104*		*30 - 130*	*08/31/18 17:11*	*09/02/18 06:43*	*1*
Phenol-d5 (Surr)	*33*		*15 - 110*	*08/31/18 17:11*	*09/02/18 06:43*	*1*
Terphenyl-d14 (Surr)	*111*		*30 - 130*	*08/31/18 17:11*	*09/02/18 06:43*	*1*
2,4,6-Tribromophenol (Surr)	*140*	*X*	*15 - 110*	*08/31/18 17:11*	*09/02/18 06:43*	*1*
2-Fluorophenol (Surr)	*49*		*15 - 110*	*08/31/18 17:11*	*09/02/18 06:43*	*1*
2-Fluorobiphenyl	*87*		*30 - 130*	*08/31/18 17:11*	*09/02/18 06:43*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 12:58	1
PCB-1016	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 12:58	1
PCB-1221	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 12:58	1
PCB-1232	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 12:58	1
PCB-1242	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 12:58	1
PCB-1248	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 12:58	1
PCB-1254	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 12:58	1
PCB-1260	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 12:58	1
PCB-1262	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 12:58	1
PCB-1268	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 12:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*84*		*30 - 150*	*09/04/18 10:18*	*09/05/18 12:58*	*1*
Tetrachloro-m-xylene	*89*		*30 - 150*	*09/04/18 10:18*	*09/05/18 12:58*	*1*
DCB Decachlorobiphenyl	*75*		*30 - 150*	*09/04/18 10:18*	*09/05/18 12:58*	*1*
DCB Decachlorobiphenyl	*79*		*30 - 150*	*09/04/18 10:18*	*09/05/18 12:58*	*1*

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.90**	**D F1**	1.20	0.78	mg/L			09/02/18 01:24	10
Sulfate	**110**	**D**	6.00	3.32	mg/L			09/02/18 01:24	10

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/09/18 05:50	09/10/18 01:52	2
Arsenic	**1.8**	**J**	2.0	0.77	ug/L		09/09/18 05:50	09/10/18 01:52	2
Barium	**9.2**		4.0	1.1	ug/L		09/09/18 05:50	09/10/18 01:52	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/09/18 05:50	09/10/18 01:52	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/09/18 05:50	09/10/18 01:52	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/09/18 05:50	09/10/18 01:52	2
Chromium	1.3	U	4.0	1.3	ug/L		09/09/18 05:50	09/10/18 01:52	2
Copper	1.9	U	4.0	1.9	ug/L		09/09/18 05:50	09/10/18 01:52	2
Manganese	**14.2**		8.0	2.7	ug/L		09/09/18 05:50	09/10/18 01:52	2
Nickel	**7.7**		4.0	1.3	ug/L		09/09/18 05:50	09/10/18 01:52	2
Lead	0.37	U	1.2	0.37	ug/L		09/09/18 05:50	09/10/18 01:52	2
Antimony	**0.96**	**J**	2.0	0.62	ug/L		09/09/18 05:50	09/10/18 01:52	2
Selenium	0.69	U	10.0	0.69	ug/L		09/09/18 05:50	09/10/18 01:52	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/09/18 05:50	09/10/18 01:52	2
Zinc	5.4	U	16.0	5.4	ug/L		09/09/18 05:50	09/10/18 01:52	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/09/18 05:50	09/10/18 01:52	2
Sodium	**46100**		200	75.7	ug/L		09/09/18 05:50	09/10/18 01:52	2
Magnesium	**6610**		200	65.7	ug/L		09/09/18 05:50	09/10/18 01:52	2

Client Sample ID: RW8(163-173)-082918

Lab Sample ID: 460-163634-1

Date Collected: 08/29/18 11:00

Matrix: Water

Date Received: 08/30/18 15:40

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**1990**		200	64.9	ug/L		09/09/18 05:50	09/10/18 01:52	2
Calcium	**31900**		200	67.6	ug/L		09/09/18 05:50	09/10/18 01:52	2
Iron	**77.1**	**J**	120	45.7	ug/L		09/09/18 05:50	09/10/18 01:52	2
Thallium	0.24	U	0.80	0.24	ug/L		09/09/18 05:50	09/10/18 01:52	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/12/18 11:55	09/12/18 15:27	2
Arsenic	**1.1**	**J**	2.0	0.77	ug/L		09/12/18 11:55	09/12/18 15:27	2
Barium	**8.5**		4.0	1.1	ug/L		09/12/18 11:55	09/12/18 15:27	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/12/18 11:55	09/12/18 15:27	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/12/18 11:55	09/12/18 15:27	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/12/18 11:55	09/12/18 15:27	2
Chromium	1.3	U	4.0	1.3	ug/L		09/12/18 11:55	09/12/18 15:27	2
Copper	1.9	U	4.0	1.9	ug/L		09/12/18 11:55	09/12/18 15:27	2
Manganese	**16.4**		8.0	2.7	ug/L		09/12/18 11:55	09/12/18 15:27	2
Nickel	**4.4**		4.0	1.3	ug/L		09/12/18 11:55	09/12/18 15:27	2
Lead	0.37	U	1.2	0.37	ug/L		09/12/18 11:55	09/12/18 15:27	2
Antimony	0.62	U	2.0	0.62	ug/L		09/12/18 11:55	09/12/18 15:27	2
Selenium	0.69	U	10.0	0.69	ug/L		09/12/18 11:55	09/12/18 15:27	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/12/18 11:55	09/12/18 15:27	2
Zinc	5.4	U	16.0	5.4	ug/L		09/12/18 11:55	09/12/18 15:27	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/12/18 11:55	09/12/18 15:27	2
Sodium	**44400**		200	75.7	ug/L		09/12/18 11:55	09/12/18 15:27	2
Magnesium	**6940**		200	65.7	ug/L		09/12/18 11:55	09/12/18 15:27	2
Potassium	**1980**		200	64.9	ug/L		09/12/18 11:55	09/12/18 15:27	2
Calcium	**33000**		200	67.6	ug/L		09/12/18 11:55	09/12/18 15:27	2
Iron	45.7	U	120	45.7	ug/L		09/12/18 11:55	09/12/18 15:27	2
Thallium	0.24	U	0.80	0.24	ug/L		09/12/18 11:55	09/12/18 15:27	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/06/18 05:32	09/06/18 08:53	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/06/18 06:02	09/06/18 09:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:05	1
Bicarbonate Alkalinity as CaCO3	**76.6**		5.0	5.0	mg/L			09/04/18 11:36	1
Alkalinity	**76.6**		5.0	5.0	mg/L			09/04/18 11:36	1

Client Sample ID: RW8(204-214)-082918

Lab Sample ID: 460-163634-2

Date Collected: 08/29/18 11:30

Matrix: Water

Date Received: 08/30/18 15:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/07/18 22:15	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Client Sample ID: RW8(204-214)-082918
Date Collected: 08/29/18 11:30
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/07/18 22:15	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/07/18 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*70 - 130*		*09/07/18 22:15*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/03/18 06:40	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/03/18 06:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/03/18 06:40	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 06:40	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/03/18 06:40	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/03/18 06:40	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/03/18 06:40	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/03/18 06:40	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/03/18 06:40	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 06:40	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/03/18 06:40	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/03/18 06:40	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/03/18 06:40	1
2-Butanone (MEK)	**5.1**		5.0	1.9	ug/L			09/03/18 06:40	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/03/18 06:40	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/03/18 06:40	1
Acetone	**5.3**		5.0	5.0	ug/L			09/03/18 06:40	1
Benzene	**2.8**		1.0	0.43	ug/L			09/03/18 06:40	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/03/18 06:40	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/03/18 06:40	1
Carbon disulfide	**1.1**		1.0	0.16	ug/L			09/03/18 06:40	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/03/18 06:40	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/03/18 06:40	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/03/18 06:40	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/03/18 06:40	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/03/18 06:40	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/03/18 06:40	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/03/18 06:40	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/03/18 06:40	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/03/18 06:40	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/03/18 06:40	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/03/18 06:40	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/03/18 06:40	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/03/18 06:40	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/03/18 06:40	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/03/18 06:40	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/03/18 06:40	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/03/18 06:40	1
Methylene Chloride	**0.35**	**J**	1.0	0.32	ug/L			09/03/18 06:40	1
Styrene	0.42	U	1.0	0.42	ug/L			09/03/18 06:40	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/03/18 06:40	1
Toluene	**0.39**	**J**	1.0	0.38	ug/L			09/03/18 06:40	1

Client Sample ID: RW8(204-214)-082918
Date Collected: 08/29/18 11:30
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/03/18 06:40	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/03/18 06:40	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/03/18 06:40	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/03/18 06:40	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/03/18 06:40	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/03/18 06:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*33*	*J*	*ug/L*		*1.46*			*09/03/18 06:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*09/03/18 06:40*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*09/03/18 06:40*	*1*
Dibromofluoromethane (Surr)	*87*		*70 - 130*		*09/03/18 06:40*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*09/03/18 06:40*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.44**		0.20	0.016	ug/L		09/01/18 09:58	09/01/18 21:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*45*		*10 - 150*	*09/01/18 09:58*	*09/01/18 21:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 17:11	09/02/18 04:05	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 17:11	09/02/18 04:05	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 17:11	09/02/18 04:05	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 17:11	09/02/18 04:05	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/31/18 17:11	09/02/18 04:05	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/31/18 17:11	09/02/18 04:05	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/31/18 17:11	09/02/18 04:05	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 17:11	09/02/18 04:05	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/31/18 17:11	09/02/18 04:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**0.65**	**J**	10	0.29	ug/L		08/31/18 17:11	09/02/18 07:04	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/31/18 17:11	09/02/18 07:04	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/31/18 17:11	09/02/18 07:04	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/02/18 07:04	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/02/18 07:04	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/02/18 07:04	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 17:11	09/02/18 07:04	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 17:11	09/02/18 07:04	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 17:11	09/02/18 07:04	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 17:11	09/02/18 07:04	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 17:11	09/02/18 07:04	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/31/18 17:11	09/02/18 07:04	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 17:11	09/02/18 07:04	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 17:11	09/02/18 07:04	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Client Sample ID: RW8(204-214)-082918
Date Collected: 08/29/18 11:30
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 17:11	09/02/18 07:04	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 17:11	09/02/18 07:04	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 17:11	09/02/18 07:04	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 07:04	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 17:11	09/02/18 07:04	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/31/18 17:11	09/02/18 07:04	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 07:04	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 17:11	09/02/18 07:04	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/02/18 07:04	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 17:11	09/02/18 07:04	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 17:11	09/02/18 07:04	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 17:11	09/02/18 07:04	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 17:11	09/02/18 07:04	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 17:11	09/02/18 07:04	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 07:04	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 07:04	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 17:11	09/02/18 07:04	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 17:11	09/02/18 07:04	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 17:11	09/02/18 07:04	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 17:11	09/02/18 07:04	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 17:11	09/02/18 07:04	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 17:11	09/02/18 07:04	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/02/18 07:04	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 17:11	09/02/18 07:04	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 17:11	09/02/18 07:04	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 17:11	09/02/18 07:04	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 17:11	09/02/18 07:04	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 17:11	09/02/18 07:04	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 17:11	09/02/18 07:04	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 17:11	09/02/18 07:04	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 17:11	09/02/18 07:04	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 17:11	09/02/18 07:04	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 17:11	09/02/18 07:04	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 17:11	09/02/18 07:04	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 17:11	09/02/18 07:04	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/02/18 07:04	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 17:11	09/02/18 07:04	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 17:11	09/02/18 07:04	1
Caprolactam	0.68	U	10	0.68	ug/L		08/31/18 17:11	09/02/18 07:04	1
Atrazine	1.3	U *	2.0	1.3	ug/L		08/31/18 17:11	09/02/18 07:04	1
2,2'-oxybis[1-chloropropane]	0.63	U *	10	0.63	ug/L		08/31/18 17:11	09/02/18 07:04	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/02/18 07:04	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/02/18 07:04	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 17:11	09/02/18 07:04	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/02/18 07:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*43*	*J*	*ug/L*		*5.90*		*08/31/18 17:11*	*09/02/18 07:04*	*1*
Benzenesulfonamide, N-butyl-	*42*	*J N*	*ug/L*		*8.48*	*3622-84-2*	*08/31/18 17:11*	*09/02/18 07:04*	*1*

Client Sample ID: RW8(204-214)-082918
Date Collected: 08/29/18 11:30
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-2
Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,9-diene-2,8-dione	6.8	J N	ug/L		8.95	82304-66-3	08/31/18 17:11	09/02/18 07:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	110		30 - 130	08/31/18 17:11	09/02/18 07:04	1
Phenol-d5 (Surr)	27		15 - 110	08/31/18 17:11	09/02/18 07:04	1
Terphenyl-d14 (Surr)	107		30 - 130	08/31/18 17:11	09/02/18 07:04	1
2,4,6-Tribromophenol (Surr)	113	X	15 - 110	08/31/18 17:11	09/02/18 07:04	1
2-Fluorophenol (Surr)	38		15 - 110	08/31/18 17:11	09/02/18 07:04	1
2-Fluorobiphenyl	93		30 - 130	08/31/18 17:11	09/02/18 07:04	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 16:57	1
PCB-1016	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 16:57	1
PCB-1221	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 16:57	1
PCB-1232	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 16:57	1
PCB-1242	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 16:57	1
PCB-1248	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 16:57	1
PCB-1254	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 16:57	1
PCB-1260	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 16:57	1
PCB-1262	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 16:57	1
PCB-1268	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 16:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	113		30 - 150	09/04/18 10:18	09/05/18 16:57	1
Tetrachloro-m-xylene	111		30 - 150	09/04/18 10:18	09/05/18 16:57	1
DCB Decachlorobiphenyl	108		30 - 150	09/04/18 10:18	09/05/18 16:57	1
DCB Decachlorobiphenyl	117		30 - 150	09/04/18 10:18	09/05/18 16:57	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**47.1**	**D**	2.40	1.56	mg/L			09/02/18 02:18	20
Sulfate	**102**	**D**	12.0	6.64	mg/L			09/02/18 02:18	20

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/09/18 05:50	09/10/18 01:55	2
Arsenic	**1.8**	**J**	2.0	0.77	ug/L		09/09/18 05:50	09/10/18 01:55	2
Barium	**15.7**		4.0	1.1	ug/L		09/09/18 05:50	09/10/18 01:55	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/09/18 05:50	09/10/18 01:55	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/09/18 05:50	09/10/18 01:55	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/09/18 05:50	09/10/18 01:55	2
Chromium	**3.5**	**J**	4.0	1.3	ug/L		09/09/18 05:50	09/10/18 01:55	2
Copper	**4.3**		4.0	1.9	ug/L		09/09/18 05:50	09/10/18 01:55	2
Manganese	**109**		8.0	2.7	ug/L		09/09/18 05:50	09/10/18 01:55	2
Nickel	**6.9**		4.0	1.3	ug/L		09/09/18 05:50	09/10/18 01:55	2
Lead	**2.1**		1.2	0.37	ug/L		09/09/18 05:50	09/10/18 01:55	2
Antimony	**1.1**	**J**	2.0	0.62	ug/L		09/09/18 05:50	09/10/18 01:55	2
Selenium	0.69	U	10.0	0.69	ug/L		09/09/18 05:50	09/10/18 01:55	2

Client Sample ID: RW8(204-214)-082918
Date Collected: 08/29/18 11:30
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-2
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	1.2	U	4.0	1.2	ug/L		09/09/18 05:50	09/10/18 01:55	2
Zinc	**46.1**		16.0	5.4	ug/L		09/09/18 05:50	09/10/18 01:55	2
Aluminum	**20.6**	**J**	40.0	15.0	ug/L		09/09/18 05:50	09/10/18 01:55	2
Sodium	**89800**		200	75.7	ug/L		09/09/18 05:50	09/10/18 01:55	2
Magnesium	**15400**		200	65.7	ug/L		09/09/18 05:50	09/10/18 01:55	2
Potassium	**51300**		200	64.9	ug/L		09/09/18 05:50	09/10/18 01:55	2
Calcium	**36300**		200	67.6	ug/L		09/09/18 05:50	09/10/18 01:55	2
Iron	**353**		120	45.7	ug/L		09/09/18 05:50	09/10/18 01:55	2
Thallium	0.24	U	0.80	0.24	ug/L		09/09/18 05:50	09/10/18 01:55	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/12/18 11:55	09/12/18 15:30	2
Arsenic	**1.7**	**J**	2.0	0.77	ug/L		09/12/18 11:55	09/12/18 15:30	2
Barium	**16.4**		4.0	1.1	ug/L		09/12/18 11:55	09/12/18 15:30	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/12/18 11:55	09/12/18 15:30	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/12/18 11:55	09/12/18 15:30	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/12/18 11:55	09/12/18 15:30	2
Chromium	1.3	U	4.0	1.3	ug/L		09/12/18 11:55	09/12/18 15:30	2
Copper	1.9	U	4.0	1.9	ug/L		09/12/18 11:55	09/12/18 15:30	2
Manganese	**88.0**		8.0	2.7	ug/L		09/12/18 11:55	09/12/18 15:30	2
Nickel	**8.4**		4.0	1.3	ug/L		09/12/18 11:55	09/12/18 15:30	2
Lead	0.37	U	1.2	0.37	ug/L		09/12/18 11:55	09/12/18 15:30	2
Antimony	0.62	U	2.0	0.62	ug/L		09/12/18 11:55	09/12/18 15:30	2
Selenium	0.69	U	10.0	0.69	ug/L		09/12/18 11:55	09/12/18 15:30	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/12/18 11:55	09/12/18 15:30	2
Zinc	5.4	U	16.0	5.4	ug/L		09/12/18 11:55	09/12/18 15:30	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/12/18 11:55	09/12/18 15:30	2
Sodium	**92000**		200	75.7	ug/L		09/12/18 11:55	09/12/18 15:30	2
Magnesium	**17200**		200	65.7	ug/L		09/12/18 11:55	09/12/18 15:30	2
Potassium	**46800**		200	64.9	ug/L		09/12/18 11:55	09/12/18 15:30	2
Calcium	**36900**		200	67.6	ug/L		09/12/18 11:55	09/12/18 15:30	2
Iron	45.7	U	120	45.7	ug/L		09/12/18 11:55	09/12/18 15:30	2
Thallium	0.24	U	0.80	0.24	ug/L		09/12/18 11:55	09/12/18 15:30	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/06/18 05:32	09/06/18 09:22	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/06/18 06:02	09/06/18 10:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:06	1
Bicarbonate Alkalinity as CaCO3	**205**		5.0	5.0	mg/L			09/04/18 11:45	1
Alkalinity	**216**		5.0	5.0	mg/L			09/04/18 11:45	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Client Sample ID: RW9A(85-95)-082918
Date Collected: 08/29/18 14:20
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/07/18 22:40	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/07/18 22:40	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/07/18 22:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*70 - 130*		*09/07/18 22:40*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/03/18 07:03	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/03/18 07:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/03/18 07:03	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 07:03	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/03/18 07:03	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/03/18 07:03	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/03/18 07:03	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/03/18 07:03	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/03/18 07:03	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 07:03	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/03/18 07:03	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/03/18 07:03	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/03/18 07:03	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/03/18 07:03	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/03/18 07:03	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/03/18 07:03	1
Acetone	5.0	U	5.0	5.0	ug/L			09/03/18 07:03	1
Benzene	0.43	U	1.0	0.43	ug/L			09/03/18 07:03	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/03/18 07:03	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/03/18 07:03	1
Carbon disulfide	**1.0**		1.0	0.16	ug/L			09/03/18 07:03	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/03/18 07:03	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/03/18 07:03	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/03/18 07:03	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/03/18 07:03	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/03/18 07:03	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/03/18 07:03	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/03/18 07:03	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/03/18 07:03	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/03/18 07:03	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/03/18 07:03	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/03/18 07:03	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/03/18 07:03	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/03/18 07:03	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/03/18 07:03	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/03/18 07:03	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/03/18 07:03	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/03/18 07:03	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/03/18 07:03	1
Styrene	0.42	U	1.0	0.42	ug/L			09/03/18 07:03	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/03/18 07:03	1

Client Sample ID: RW9A(85-95)-082918
Date Collected: 08/29/18 14:20
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			09/03/18 07:03	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/03/18 07:03	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/03/18 07:03	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/03/18 07:03	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/03/18 07:03	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/03/18 07:03	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/03/18 07:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/03/18 07:03*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*09/03/18 07:03*	*1*
4-Bromofluorobenzene	*92*		*70 - 130*		*09/03/18 07:03*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*		*09/03/18 07:03*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/03/18 07:03*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/01/18 09:58	09/01/18 22:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*42*		*10 - 150*	*09/01/18 09:58*	*09/01/18 22:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 17:11	09/02/18 04:26	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 17:11	09/02/18 04:26	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 17:11	09/02/18 04:26	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 17:11	09/02/18 04:26	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/31/18 17:11	09/02/18 04:26	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/31/18 17:11	09/02/18 04:26	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/31/18 17:11	09/02/18 04:26	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 17:11	09/02/18 04:26	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/31/18 17:11	09/02/18 04:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/31/18 17:11	09/02/18 07:25	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/31/18 17:11	09/02/18 07:25	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/31/18 17:11	09/02/18 07:25	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/02/18 07:25	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/02/18 07:25	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/02/18 07:25	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 17:11	09/02/18 07:25	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 17:11	09/02/18 07:25	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 17:11	09/02/18 07:25	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 17:11	09/02/18 07:25	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 17:11	09/02/18 07:25	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/31/18 17:11	09/02/18 07:25	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 17:11	09/02/18 07:25	1

Client Sample ID: RW9A(85-95)-082918
Date Collected: 08/29/18 14:20
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 17:11	09/02/18 07:25	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 17:11	09/02/18 07:25	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 17:11	09/02/18 07:25	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 17:11	09/02/18 07:25	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 07:25	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 17:11	09/02/18 07:25	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/31/18 17:11	09/02/18 07:25	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 07:25	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 17:11	09/02/18 07:25	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/02/18 07:25	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 17:11	09/02/18 07:25	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 17:11	09/02/18 07:25	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 17:11	09/02/18 07:25	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 17:11	09/02/18 07:25	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 17:11	09/02/18 07:25	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 07:25	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 07:25	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 17:11	09/02/18 07:25	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 17:11	09/02/18 07:25	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 17:11	09/02/18 07:25	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 17:11	09/02/18 07:25	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 17:11	09/02/18 07:25	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 17:11	09/02/18 07:25	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/02/18 07:25	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 17:11	09/02/18 07:25	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 17:11	09/02/18 07:25	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 17:11	09/02/18 07:25	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 17:11	09/02/18 07:25	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 17:11	09/02/18 07:25	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 17:11	09/02/18 07:25	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 17:11	09/02/18 07:25	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 17:11	09/02/18 07:25	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 17:11	09/02/18 07:25	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 17:11	09/02/18 07:25	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 17:11	09/02/18 07:25	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 17:11	09/02/18 07:25	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/02/18 07:25	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 17:11	09/02/18 07:25	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 17:11	09/02/18 07:25	1
Caprolactam	0.68	U	10	0.68	ug/L		08/31/18 17:11	09/02/18 07:25	1
Atrazine	1.3	U *	2.0	1.3	ug/L		08/31/18 17:11	09/02/18 07:25	1
2,2'-oxybis[1-chloropropane]	0.63	U *	10	0.63	ug/L		08/31/18 17:11	09/02/18 07:25	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/02/18 07:25	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/02/18 07:25	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 17:11	09/02/18 07:25	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/02/18 07:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/31/18 17:11*	*09/02/18 07:25*	*1*

Client Sample ID: RW9A(85-95)-082918

Date Collected: 08/29/18 14:20
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	92		30 - 130	08/31/18 17:11	09/02/18 07:25	1
Phenol-d5 (Surr)	30		15 - 110	08/31/18 17:11	09/02/18 07:25	1
Terphenyl-d14 (Surr)	109		30 - 130	08/31/18 17:11	09/02/18 07:25	1
2,4,6-Tribromophenol (Surr)	121	X	15 - 110	08/31/18 17:11	09/02/18 07:25	1
2-Fluorophenol (Surr)	44		15 - 110	08/31/18 17:11	09/02/18 07:25	1
2-Fluorobiphenyl	76		30 - 130	08/31/18 17:11	09/02/18 07:25	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 13:33	1
PCB-1016	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 13:33	1
PCB-1221	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 13:33	1
PCB-1232	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 13:33	1
PCB-1242	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 13:33	1
PCB-1248	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 13:33	1
PCB-1254	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 13:33	1
PCB-1260	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 13:33	1
PCB-1262	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 13:33	1
PCB-1268	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 13:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	77		30 - 150	09/04/18 10:18	09/05/18 13:33	1
Tetrachloro-m-xylene	81		30 - 150	09/04/18 10:18	09/05/18 13:33	1
DCB Decachlorobiphenyl	61		30 - 150	09/04/18 10:18	09/05/18 13:33	1
DCB Decachlorobiphenyl	59		30 - 150	09/04/18 10:18	09/05/18 13:33	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.70**		0.12	0.078	mg/L			08/31/18 21:57	1
Sulfate	**11.9**		0.60	0.33	mg/L			08/31/18 21:57	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/09/18 05:50	09/10/18 01:57	2
Arsenic	**2.6**		2.0	0.77	ug/L		09/09/18 05:50	09/10/18 01:57	2
Barium	**10.0**		4.0	1.1	ug/L		09/09/18 05:50	09/10/18 01:57	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/09/18 05:50	09/10/18 01:57	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/09/18 05:50	09/10/18 01:57	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/09/18 05:50	09/10/18 01:57	2
Chromium	1.3	U	4.0	1.3	ug/L		09/09/18 05:50	09/10/18 01:57	2
Copper	1.9	U	4.0	1.9	ug/L		09/09/18 05:50	09/10/18 01:57	2
Manganese	**34.6**		8.0	2.7	ug/L		09/09/18 05:50	09/10/18 01:57	2
Nickel	**6.3**		4.0	1.3	ug/L		09/09/18 05:50	09/10/18 01:57	2
Lead	0.37	U	1.2	0.37	ug/L		09/09/18 05:50	09/10/18 01:57	2
Antimony	**1.4**	**J**	2.0	0.62	ug/L		09/09/18 05:50	09/10/18 01:57	2
Selenium	0.69	U	10.0	0.69	ug/L		09/09/18 05:50	09/10/18 01:57	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/09/18 05:50	09/10/18 01:57	2
Zinc	**9.4**	**J**	16.0	5.4	ug/L		09/09/18 05:50	09/10/18 01:57	2
Aluminum	**37.6**	**J**	40.0	15.0	ug/L		09/09/18 05:50	09/10/18 01:57	2
Sodium	**4940**		200	75.7	ug/L		09/09/18 05:50	09/10/18 01:57	2
Magnesium	**5800**		200	65.7	ug/L		09/09/18 05:50	09/10/18 01:57	2

Client Sample ID: RW9A(85-95)-082918

Lab Sample ID: 460-163634-3

Date Collected: 08/29/18 14:20

Matrix: Water

Date Received: 08/30/18 15:40

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**2020**		200	64.9	ug/L		09/09/18 05:50	09/10/18 01:57	2
Calcium	**23900**		200	67.6	ug/L		09/09/18 05:50	09/10/18 01:57	2
Iron	**258**		120	45.7	ug/L		09/09/18 05:50	09/10/18 01:57	2
Thallium	0.24	U	0.80	0.24	ug/L		09/09/18 05:50	09/10/18 01:57	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/12/18 11:55	09/12/18 15:33	2
Arsenic	**2.6**		2.0	0.77	ug/L		09/12/18 11:55	09/12/18 15:33	2
Barium	**9.2**		4.0	1.1	ug/L		09/12/18 11:55	09/12/18 15:33	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/12/18 11:55	09/12/18 15:33	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/12/18 11:55	09/12/18 15:33	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/12/18 11:55	09/12/18 15:33	2
Chromium	1.3	U	4.0	1.3	ug/L		09/12/18 11:55	09/12/18 15:33	2
Copper	1.9	U	4.0	1.9	ug/L		09/12/18 11:55	09/12/18 15:33	2
Manganese	**30.5**		8.0	2.7	ug/L		09/12/18 11:55	09/12/18 15:33	2
Nickel	**13.9**		4.0	1.3	ug/L		09/12/18 11:55	09/12/18 15:33	2
Lead	0.37	U	1.2	0.37	ug/L		09/12/18 11:55	09/12/18 15:33	2
Antimony	0.62	U	2.0	0.62	ug/L		09/12/18 11:55	09/12/18 15:33	2
Selenium	0.69	U	10.0	0.69	ug/L		09/12/18 11:55	09/12/18 15:33	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/12/18 11:55	09/12/18 15:33	2
Zinc	5.4	U	16.0	5.4	ug/L		09/12/18 11:55	09/12/18 15:33	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/12/18 11:55	09/12/18 15:33	2
Sodium	**4680**		200	75.7	ug/L		09/12/18 11:55	09/12/18 15:33	2
Magnesium	**5530**		200	65.7	ug/L		09/12/18 11:55	09/12/18 15:33	2
Potassium	**1930**		200	64.9	ug/L		09/12/18 11:55	09/12/18 15:33	2
Calcium	**23000**		200	67.6	ug/L		09/12/18 11:55	09/12/18 15:33	2
Iron	45.7	U	120	45.7	ug/L		09/12/18 11:55	09/12/18 15:33	2
Thallium	0.24	U	0.80	0.24	ug/L		09/12/18 11:55	09/12/18 15:33	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/06/18 05:32	09/06/18 09:24	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/06/18 06:02	09/06/18 10:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:07	1
Bicarbonate Alkalinity as CaCO3	**77.4**		5.0	5.0	mg/L			09/04/18 11:53	1
Alkalinity	**77.4**		5.0	5.0	mg/L			09/04/18 11:53	1

Client Sample ID: RW9(206-216)-082918

Lab Sample ID: 460-163634-4

Date Collected: 08/29/18 15:30

Matrix: Water

Date Received: 08/30/18 15:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/07/18 23:05	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Client Sample ID: RW9(206-216)-082918
Date Collected: 08/29/18 15:30
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/07/18 23:05	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/07/18 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*70 - 130*		*09/07/18 23:05*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/03/18 07:25	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/03/18 07:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/03/18 07:25	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 07:25	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/03/18 07:25	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/03/18 07:25	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/03/18 07:25	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/03/18 07:25	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/03/18 07:25	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 07:25	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/03/18 07:25	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/03/18 07:25	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/03/18 07:25	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/03/18 07:25	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/03/18 07:25	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/03/18 07:25	1
Acetone	**5.6**		5.0	5.0	ug/L			09/03/18 07:25	1
Benzene	0.43	U	1.0	0.43	ug/L			09/03/18 07:25	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/03/18 07:25	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/03/18 07:25	1
Carbon disulfide	**5.8**		1.0	0.16	ug/L			09/03/18 07:25	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/03/18 07:25	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/03/18 07:25	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/03/18 07:25	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/03/18 07:25	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/03/18 07:25	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/03/18 07:25	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/03/18 07:25	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/03/18 07:25	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/03/18 07:25	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/03/18 07:25	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/03/18 07:25	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/03/18 07:25	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/03/18 07:25	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/03/18 07:25	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/03/18 07:25	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/03/18 07:25	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/03/18 07:25	1
Methylene Chloride	**0.41**	**J**	1.0	0.32	ug/L			09/03/18 07:25	1
Styrene	0.42	U	1.0	0.42	ug/L			09/03/18 07:25	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/03/18 07:25	1
Toluene	**1.1**		1.0	0.38	ug/L			09/03/18 07:25	1

Client Sample ID: RW9(206-216)-082918
Date Collected: 08/29/18 15:30
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/03/18 07:25	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/03/18 07:25	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/03/18 07:25	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/03/18 07:25	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/03/18 07:25	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/03/18 07:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*40*	*J*	*ug/L*		*1.47*			*09/03/18 07:25*	*1*
1-Propene, 2-methyl-	*12*	*J N*	*ug/L*		*1.67*	*115-11-7*		*09/03/18 07:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*09/03/18 07:25*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*09/03/18 07:25*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*09/03/18 07:25*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*09/03/18 07:25*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/01/18 09:58	09/01/18 22:18	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*09/01/18 09:58*	*09/01/18 22:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 17:11	09/02/18 04:47	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 17:11	09/02/18 04:47	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 17:11	09/02/18 04:47	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 17:11	09/02/18 04:47	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		08/31/18 17:11	09/02/18 04:47	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/31/18 17:11	09/02/18 04:47	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		08/31/18 17:11	09/02/18 04:47	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 17:11	09/02/18 04:47	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/31/18 17:11	09/02/18 04:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/31/18 17:11	09/02/18 07:46	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/31/18 17:11	09/02/18 07:46	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/31/18 17:11	09/02/18 07:46	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/02/18 07:46	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/02/18 07:46	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/02/18 07:46	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 17:11	09/02/18 07:46	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 17:11	09/02/18 07:46	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 17:11	09/02/18 07:46	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 17:11	09/02/18 07:46	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 17:11	09/02/18 07:46	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/31/18 17:11	09/02/18 07:46	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 17:11	09/02/18 07:46	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Client Sample ID: RW9(206-216)-082918
Date Collected: 08/29/18 15:30
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 17:11	09/02/18 07:46	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 17:11	09/02/18 07:46	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 17:11	09/02/18 07:46	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 17:11	09/02/18 07:46	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 07:46	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 17:11	09/02/18 07:46	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/31/18 17:11	09/02/18 07:46	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 07:46	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 17:11	09/02/18 07:46	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/02/18 07:46	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 17:11	09/02/18 07:46	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 17:11	09/02/18 07:46	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 17:11	09/02/18 07:46	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 17:11	09/02/18 07:46	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 17:11	09/02/18 07:46	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 07:46	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/02/18 07:46	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 17:11	09/02/18 07:46	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 17:11	09/02/18 07:46	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 17:11	09/02/18 07:46	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 17:11	09/02/18 07:46	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 17:11	09/02/18 07:46	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 17:11	09/02/18 07:46	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/02/18 07:46	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 17:11	09/02/18 07:46	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 17:11	09/02/18 07:46	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 17:11	09/02/18 07:46	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 17:11	09/02/18 07:46	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 17:11	09/02/18 07:46	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 17:11	09/02/18 07:46	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 17:11	09/02/18 07:46	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 17:11	09/02/18 07:46	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 17:11	09/02/18 07:46	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 17:11	09/02/18 07:46	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 17:11	09/02/18 07:46	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 17:11	09/02/18 07:46	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/02/18 07:46	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 17:11	09/02/18 07:46	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 17:11	09/02/18 07:46	1
Caprolactam	0.68	U	10	0.68	ug/L		08/31/18 17:11	09/02/18 07:46	1
Atrazine	1.3	U *	2.0	1.3	ug/L		08/31/18 17:11	09/02/18 07:46	1
2,2'-oxybis[1-chloropropane]	0.63	U *	10	0.63	ug/L		08/31/18 17:11	09/02/18 07:46	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/02/18 07:46	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/02/18 07:46	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 17:11	09/02/18 07:46	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/02/18 07:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzenesulfonamide, N-butyl-	*15*	*J N*	*ug/L*		*8.47*	*3622-84-2*	*08/31/18 17:11*	*09/02/18 07:46*	*1*

Client Sample ID: RW9(206-216)-082918
Date Collected: 08/29/18 15:30
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-4
Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,9-diene-2,8-dione	6.9	J N	ug/L		8.95	82304-66-3	08/31/18 17:11	09/02/18 07:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	116		30 - 130	08/31/18 17:11	09/02/18 07:46	1
Phenol-d5 (Surr)	33		15 - 110	08/31/18 17:11	09/02/18 07:46	1
Terphenyl-d14 (Surr)	104		30 - 130	08/31/18 17:11	09/02/18 07:46	1
2,4,6-Tribromophenol (Surr)	148	X	15 - 110	08/31/18 17:11	09/02/18 07:46	1
2-Fluorophenol (Surr)	51		15 - 110	08/31/18 17:11	09/02/18 07:46	1
2-Fluorobiphenyl	96		30 - 130	08/31/18 17:11	09/02/18 07:46	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 13:50	1
PCB-1016	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 13:50	1
PCB-1221	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 13:50	1
PCB-1232	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 13:50	1
PCB-1242	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 13:50	1
PCB-1248	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 13:50	1
PCB-1254	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 13:50	1
PCB-1260	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 13:50	1
PCB-1262	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 13:50	1
PCB-1268	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 13:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		30 - 150	09/04/18 10:18	09/05/18 13:50	1
Tetrachloro-m-xylene	72		30 - 150	09/04/18 10:18	09/05/18 13:50	1
DCB Decachlorobiphenyl	79		30 - 150	09/04/18 10:18	09/05/18 13:50	1
DCB Decachlorobiphenyl	79		30 - 150	09/04/18 10:18	09/05/18 13:50	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.46**	**D**	0.60	0.39	mg/L			09/02/18 03:12	5

Method: 9056A - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**377**	**D**	24.0	13.3	mg/L			09/02/18 04:04	40

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/09/18 05:50	09/10/18 02:00	2
Arsenic	**2.5**		2.0	0.77	ug/L		09/09/18 05:50	09/10/18 02:00	2
Barium	**52.3**		4.0	1.1	ug/L		09/09/18 05:50	09/10/18 02:00	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/09/18 05:50	09/10/18 02:00	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/09/18 05:50	09/10/18 02:00	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/09/18 05:50	09/10/18 02:00	2
Chromium	1.3	U	4.0	1.3	ug/L		09/09/18 05:50	09/10/18 02:00	2
Copper	**7.8**		4.0	1.9	ug/L		09/09/18 05:50	09/10/18 02:00	2
Manganese	**177**		8.0	2.7	ug/L		09/09/18 05:50	09/10/18 02:00	2
Nickel	1.3	U	4.0	1.3	ug/L		09/09/18 05:50	09/10/18 02:00	2
Lead	0.37	U	1.2	0.37	ug/L		09/09/18 05:50	09/10/18 02:00	2

Client Sample ID: RW9(206-216)-082918

Date Collected: 08/29/18 15:30
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-4

Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.4**	**J**	2.0	0.62	ug/L		09/09/18 05:50	09/10/18 02:00	2
Selenium	0.69	U	10.0	0.69	ug/L		09/09/18 05:50	09/10/18 02:00	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/09/18 05:50	09/10/18 02:00	2
Zinc	**8.9**	**J**	16.0	5.4	ug/L		09/09/18 05:50	09/10/18 02:00	2
Aluminum	**224**		40.0	15.0	ug/L		09/09/18 05:50	09/10/18 02:00	2
Sodium	**145000**		200	75.7	ug/L		09/09/18 05:50	09/10/18 02:00	2
Magnesium	**16600**		200	65.7	ug/L		09/09/18 05:50	09/10/18 02:00	2
Potassium	**14300**		200	64.9	ug/L		09/09/18 05:50	09/10/18 02:00	2
Calcium	**71100**		200	67.6	ug/L		09/09/18 05:50	09/10/18 02:00	2
Iron	**278**		120	45.7	ug/L		09/09/18 05:50	09/10/18 02:00	2
Thallium	0.24	U	0.80	0.24	ug/L		09/09/18 05:50	09/10/18 02:00	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/12/18 11:55	09/12/18 15:35	2
Arsenic	**2.2**		2.0	0.77	ug/L		09/12/18 11:55	09/12/18 15:35	2
Barium	**62.6**		4.0	1.1	ug/L		09/12/18 11:55	09/12/18 15:35	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/12/18 11:55	09/12/18 15:35	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/12/18 11:55	09/12/18 15:35	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/12/18 11:55	09/12/18 15:35	2
Chromium	1.3	U	4.0	1.3	ug/L		09/12/18 11:55	09/12/18 15:35	2
Copper	1.9	U	4.0	1.9	ug/L		09/12/18 11:55	09/12/18 15:35	2
Manganese	**86.6**		8.0	2.7	ug/L		09/12/18 11:55	09/12/18 15:35	2
Nickel	1.3	U	4.0	1.3	ug/L		09/12/18 11:55	09/12/18 15:35	2
Lead	0.37	U	1.2	0.37	ug/L		09/12/18 11:55	09/12/18 15:35	2
Antimony	0.62	U	2.0	0.62	ug/L		09/12/18 11:55	09/12/18 15:35	2
Selenium	0.69	U	10.0	0.69	ug/L		09/12/18 11:55	09/12/18 15:35	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/12/18 11:55	09/12/18 15:35	2
Zinc	5.4	U	16.0	5.4	ug/L		09/12/18 11:55	09/12/18 15:35	2
Aluminum	**178**		40.0	15.0	ug/L		09/12/18 11:55	09/12/18 15:35	2
Sodium	**152000**		200	75.7	ug/L		09/12/18 11:55	09/12/18 15:35	2
Magnesium	**17000**		200	65.7	ug/L		09/12/18 11:55	09/12/18 15:35	2
Potassium	**18100**		200	64.9	ug/L		09/12/18 11:55	09/12/18 15:35	2
Calcium	**65300**		200	67.6	ug/L		09/12/18 11:55	09/12/18 15:35	2
Iron	45.7	U	120	45.7	ug/L		09/12/18 11:55	09/12/18 15:35	2
Thallium	0.24	U	0.80	0.24	ug/L		09/12/18 11:55	09/12/18 15:35	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/06/18 05:32	09/06/18 09:25	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/06/18 06:02	09/06/18 10:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:08	1
Bicarbonate Alkalinity as CaCO3	**101**		5.0	5.0	mg/L			09/04/18 12:00	1
Alkalinity	**125**		5.0	5.0	mg/L			09/04/18 12:00	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Client Sample ID: TB-05-083018
Date Collected: 08/30/18 00:00
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/07/18 23:30	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/07/18 23:30	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/07/18 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*09/07/18 23:30*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/03/18 02:11	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/03/18 02:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/03/18 02:11	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 02:11	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/03/18 02:11	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/03/18 02:11	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/03/18 02:11	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/03/18 02:11	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/03/18 02:11	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 02:11	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/03/18 02:11	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/03/18 02:11	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/03/18 02:11	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/03/18 02:11	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/03/18 02:11	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/03/18 02:11	1
Acetone	5.0	U	5.0	5.0	ug/L			09/03/18 02:11	1
Benzene	0.43	U	1.0	0.43	ug/L			09/03/18 02:11	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/03/18 02:11	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/03/18 02:11	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/03/18 02:11	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/03/18 02:11	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/03/18 02:11	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/03/18 02:11	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/03/18 02:11	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/03/18 02:11	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/03/18 02:11	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/03/18 02:11	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/03/18 02:11	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/03/18 02:11	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/03/18 02:11	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/03/18 02:11	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/03/18 02:11	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/03/18 02:11	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/03/18 02:11	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/03/18 02:11	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/03/18 02:11	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/03/18 02:11	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/03/18 02:11	1
Styrene	0.42	U	1.0	0.42	ug/L			09/03/18 02:11	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/03/18 02:11	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Client Sample ID: TB-05-083018
Date Collected: 08/30/18 00:00
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			09/03/18 02:11	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/03/18 02:11	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/03/18 02:11	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/03/18 02:11	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/03/18 02:11	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/03/18 02:11	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/03/18 02:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/03/18 02:11*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*09/03/18 02:11*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/03/18 02:11*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*09/03/18 02:11*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*09/03/18 02:11*	*1*

Surrogate Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
460-163634-1	RW8(163-173)-082918	103	96	96	102
460-163634-2	RW8(204-214)-082918	92	94	87	105
460-163634-3	RW9A(85-95)-082918	95	92	88	102
460-163634-4	RW9(206-216)-082918	95	94	90	105
460-163634-5	TB-05-083018	95	95	90	106
LCS 460-549256/5	Lab Control Sample	101	98	91	100
LCS 460-549424/3	Lab Control Sample	97	97	93	107
LCSD 460-549256/7	Lab Control Sample Dup	102	99	92	101
LCSD 460-549424/4	Lab Control Sample Dup	94	95	89	106
MB 460-549256/9	Method Blank	102	95	92	100
MB 460-549424/7	Method Blank	95	93	88	105

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(70-130)
460-163634-1	RW8(163-173)-082918	108
460-163634-2	RW8(204-214)-082918	107
460-163634-3	RW9A(85-95)-082918	109
460-163634-4	RW9(206-216)-082918	108
460-163634-5	TB-05-083018	102
LCS 460-550312/4	Lab Control Sample	109
LCSD 460-550312/5	Lab Control Sample Dup	113
MB 460-550312/9	Method Blank	102

Surrogate Legend

BFB = 4-Bromofluorobenzene

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	PHL	TPHL	TBP	2FP	FBP
Lab Sample ID	Client Sample ID	(30-130)	(15-110)	(30-130)	(15-110)	(15-110)	(30-130)
460-163445-H-1-A MSD	Matrix Spike Duplicate	82	24	82	123 X	35	83
460-163445-J-1-A MS	Matrix Spike	89	27	82	131 X	38	87
460-163634-1	RW8(163-173)-082918	104	33	111	140 X	49	87
460-163634-2	RW8(204-214)-082918	110	27	107	113 X	38	93
460-163634-3	RW9A(85-95)-082918	92	30	109	121 X	44	76
460-163634-4	RW9(206-216)-082918	116	33	104	148 X	51	96
LCS 460-549018/2-A	Lab Control Sample	91	46	94	116 X	57	88
LCS 460-549018/4-A	Lab Control Sample	107	37	120	155 X	53	91

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		NBZ	PHL	TPHL	TBP	2FP	FBP		
Lab Sample ID	Client Sample ID	(30-130)	(15-110)	(30-130)	(15-110)	(15-110)	(30-130)		
MB 460-549018/1-A	Method Blank	108	34	112	140 X	52	89		

Surrogate Legend

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

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TCX1	TCX2	DCBP1	DCBP2				
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)				
460-163634-1	RW8(163-173)-082918	84	89	75	79				
460-163634-2	RW8(204-214)-082918	113	111	108	117				
460-163634-3	RW9A(85-95)-082918	77	81	61	59				
460-163634-4	RW9(206-216)-082918	75	72	79	79				
LCS 460-549539/2-A	Lab Control Sample	81	87	90	99				
LCSD 460-549539/3-A	Lab Control Sample Dup	82	80	99	99				
MB 460-549539/1-A	Method Blank	87	93	94	101				

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Isotope Dilution Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DXE (10-150)
460-163634-1	RW8(163-173)-082918	27
460-163634-2	RW8(204-214)-082918	45
460-163634-3	RW9A(85-95)-082918	42
460-163634-4	RW9(206-216)-082918	38
MB 460-549186/1-A	Method Blank	36

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DXE (10-200)
LCS 460-549186/2-A	Lab Control Sample	35
LCSD 460-549186/3-A	Lab Control Sample Dup	35

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-549256/9
Matrix: Water
Analysis Batch: 549256

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/01/18 21:52	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/01/18 21:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/01/18 21:52	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 21:52	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/01/18 21:52	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/01/18 21:52	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/01/18 21:52	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/01/18 21:52	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/01/18 21:52	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/01/18 21:52	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/01/18 21:52	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/01/18 21:52	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/01/18 21:52	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/01/18 21:52	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/01/18 21:52	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/01/18 21:52	1
Acetone	5.0	U	5.0	5.0	ug/L			09/01/18 21:52	1
Benzene	0.43	U	1.0	0.43	ug/L			09/01/18 21:52	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/01/18 21:52	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/01/18 21:52	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/01/18 21:52	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/01/18 21:52	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/01/18 21:52	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/01/18 21:52	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/01/18 21:52	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/01/18 21:52	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/01/18 21:52	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/01/18 21:52	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/01/18 21:52	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/01/18 21:52	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/01/18 21:52	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/01/18 21:52	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/01/18 21:52	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/01/18 21:52	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/01/18 21:52	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/01/18 21:52	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/01/18 21:52	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/01/18 21:52	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/01/18 21:52	1
Styrene	0.42	U	1.0	0.42	ug/L			09/01/18 21:52	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/01/18 21:52	1
Toluene	0.38	U	1.0	0.38	ug/L			09/01/18 21:52	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/01/18 21:52	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/01/18 21:52	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/01/18 21:52	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/01/18 21:52	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/01/18 21:52	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/01/18 21:52	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					09/01/18 21:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		09/01/18 21:52	1
4-Bromofluorobenzene	95		70 - 130		09/01/18 21:52	1
Dibromofluoromethane (Surr)	92		70 - 130		09/01/18 21:52	1
Toluene-d8 (Surr)	100		70 - 130		09/01/18 21:52	1

Lab Sample ID: LCS 460-549256/5
Matrix: Water
Analysis Batch: 549256

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.4		ug/L		97	70 - 130
1,1,2,2-Tetrachloroethane	20.0	20.5		ug/L		103	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	15.5		ug/L		78	70 - 130
1,1,2-Trichloroethane	20.0	20.3		ug/L		102	70 - 130
1,1-Dichloroethane	20.0	21.3		ug/L		107	70 - 130
1,1-Dichloroethene	20.0	16.2		ug/L		81	70 - 130
1,2,3-Trichlorobenzene	20.0	22.4		ug/L		112	70 - 130
1,2,4-Trichlorobenzene	20.0	22.6		ug/L		113	70 - 130
1,2-Dichlorobenzene	20.0	20.8		ug/L		104	70 - 130
1,2-Dichloroethane	20.0	20.3		ug/L		101	70 - 130
1,2-Dichloropropane	20.0	22.3		ug/L		111	70 - 130
1,3-Dichlorobenzene	20.0	20.2		ug/L		101	70 - 130
1,4-Dichlorobenzene	20.0	20.2		ug/L		101	70 - 130
2-Butanone (MEK)	100	89.8		ug/L		90	40 - 160
2-Hexanone	100	105		ug/L		105	40 - 160
4-Methyl-2-pentanone (MIBK)	100	108		ug/L		108	40 - 160
Acetone	100	76.9		ug/L		77	40 - 160
Benzene	20.0	22.8		ug/L		114	70 - 130
Bromoform	20.0	17.6		ug/L		88	70 - 130
Bromomethane	20.0	2.64	*	ug/L		13	40 - 160
Carbon disulfide	20.0	16.0		ug/L		80	40 - 160
Carbon tetrachloride	20.0	17.8		ug/L		89	70 - 130
Chlorobenzene	20.0	20.7		ug/L		103	70 - 130
Chlorobromomethane	20.0	18.2		ug/L		91	70 - 130
Chlorodibromomethane	20.0	18.7		ug/L		94	70 - 130
Chloroethane	20.0	15.6		ug/L		78	40 - 160
Chloroform	20.0	21.0		ug/L		105	70 - 130
Chloromethane	20.0	18.4		ug/L		92	40 - 160
cis-1,2-Dichloroethene	20.0	20.0		ug/L		100	70 - 130
cis-1,3-Dichloropropene	20.0	21.8		ug/L		109	70 - 130
Cyclohexane	20.0	20.4		ug/L		102	70 - 130
Dichlorobromomethane	20.0	20.0		ug/L		100	70 - 130
Dichlorodifluoromethane	20.0	15.1		ug/L		76	40 - 160
Ethylbenzene	20.0	20.6		ug/L		103	70 - 130
Isopropylbenzene	20.0	22.2		ug/L		111	70 - 130
Methyl acetate	40.0	40.5		ug/L		101	70 - 130
Methyl tert-butyl ether	20.0	17.8		ug/L		89	70 - 130
Methylcyclohexane	20.0	20.5		ug/L		103	70 - 130
Methylene Chloride	20.0	18.2		ug/L		91	70 - 130

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

Lab Sample ID: LCS 460-549256/5
Matrix: Water
Analysis Batch: 549256

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Styrene			20.0	21.2		ug/L		106	70 - 130		
Tetrachloroethene			20.0	19.1		ug/L		96	70 - 130		
Toluene			20.0	20.6		ug/L		103	70 - 130		
trans-1,2-Dichloroethene			20.0	16.1		ug/L		80	70 - 130		
trans-1,3-Dichloropropene			20.0	21.8		ug/L		109	70 - 130		
Trichloroethene			20.0	19.1		ug/L		95	70 - 130		
Trichlorofluoromethane			20.0	15.0		ug/L		75	40 - 160		
Vinyl chloride			20.0	17.2		ug/L		86	70 - 130		
Xylenes, Total			40.0	42.0		ug/L		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 460-549256/7
Matrix: Water
Analysis Batch: 549256

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	19.3		ug/L		97	70 - 130	1	20
1,1,2,2-Tetrachloroethane			20.0	19.9		ug/L		100	70 - 130	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane			20.0	15.6		ug/L		78	70 - 130	0	20
1,1,2-Trichloroethane			20.0	19.9		ug/L		99	70 - 130	2	20
1,1-Dichloroethane			20.0	21.4		ug/L		107	70 - 130	0	20
1,1-Dichloroethene			20.0	15.8		ug/L		79	70 - 130	2	20
1,2,3-Trichlorobenzene			20.0	20.9		ug/L		104	70 - 130	7	20
1,2,4-Trichlorobenzene			20.0	21.0		ug/L		105	70 - 130	8	20
1,2-Dichlorobenzene			20.0	19.8		ug/L		99	70 - 130	5	20
1,2-Dichloroethane			20.0	19.6		ug/L		98	70 - 130	3	20
1,2-Dichloropropane			20.0	21.0		ug/L		105	70 - 130	6	20
1,3-Dichlorobenzene			20.0	19.0		ug/L		95	70 - 130	6	20
1,4-Dichlorobenzene			20.0	19.1		ug/L		95	70 - 130	6	20
2-Butanone (MEK)			100	86.2		ug/L		86	40 - 160	4	20
2-Hexanone			100	102		ug/L		102	40 - 160	3	20
4-Methyl-2-pentanone (MIBK)			100	104		ug/L		104	40 - 160	3	20
Acetone			100	74.7		ug/L		75	40 - 160	3	20
Benzene			20.0	22.0		ug/L		110	70 - 130	3	20
Bromoform			20.0	17.5		ug/L		87	70 - 130	1	20
Bromomethane			20.0	2.27	*	ug/L		11	40 - 160	15	20
Carbon disulfide			20.0	15.8		ug/L		79	40 - 160	1	20
Carbon tetrachloride			20.0	17.5		ug/L		87	70 - 130	2	20
Chlorobenzene			20.0	19.9		ug/L		100	70 - 130	4	20
Chlorobromomethane			20.0	18.1		ug/L		91	70 - 130	1	20
Chlorodibromomethane			20.0	18.3		ug/L		91	70 - 130	3	20
Chloroethane			20.0	15.3		ug/L		77	40 - 160	2	20

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

Lab Sample ID: LCSD 460-549256/7
Matrix: Water
Analysis Batch: 549256

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroform			20.0	20.2		ug/L		101	70 - 130	4	20
Chloromethane			20.0	17.9		ug/L		90	40 - 160	3	20
cis-1,2-Dichloroethene			20.0	19.0		ug/L		95	70 - 130	5	20
cis-1,3-Dichloropropene			20.0	20.8		ug/L		104	70 - 130	5	20
Cyclohexane			20.0	20.5		ug/L		103	70 - 130	1	20
Dichlorobromomethane			20.0	19.3		ug/L		96	70 - 130	4	20
Dichlorodifluoromethane			20.0	14.4		ug/L		72	40 - 160	5	20
Ethylbenzene			20.0	20.1		ug/L		101	70 - 130	2	20
Isopropylbenzene			20.0	21.4		ug/L		107	70 - 130	4	20
Methyl acetate			40.0	39.2		ug/L		98	70 - 130	3	20
Methyl tert-butyl ether			20.0	17.3		ug/L		87	70 - 130	3	20
Methylcyclohexane			20.0	20.4		ug/L		102	70 - 130	1	20
Methylene Chloride			20.0	15.5		ug/L		78	70 - 130	16	20
Styrene			20.0	20.4		ug/L		102	70 - 130	4	20
Tetrachloroethene			20.0	18.5		ug/L		93	70 - 130	3	20
Toluene			20.0	19.8		ug/L		99	70 - 130	4	20
trans-1,2-Dichloroethene			20.0	15.7		ug/L		78	70 - 130	2	20
trans-1,3-Dichloropropene			20.0	21.3		ug/L		106	70 - 130	2	20
Trichloroethene			20.0	18.8		ug/L		94	70 - 130	2	20
Trichlorofluoromethane			20.0	14.9		ug/L		74	40 - 160	0	20
Vinyl chloride			20.0	16.9		ug/L		85	70 - 130	1	20
Xylenes, Total			40.0	40.4		ug/L		101	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 460-549424/7
Matrix: Water
Analysis Batch: 549424

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/03/18 00:43	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/03/18 00:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/03/18 00:43	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 00:43	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/03/18 00:43	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/03/18 00:43	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/03/18 00:43	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/03/18 00:43	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/03/18 00:43	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/03/18 00:43	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/03/18 00:43	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/03/18 00:43	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/03/18 00:43	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/03/18 00:43	1

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

Lab Sample ID: MB 460-549424/7
Matrix: Water
Analysis Batch: 549424

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/03/18 00:43	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/03/18 00:43	1
Acetone	5.0	U	5.0	5.0	ug/L			09/03/18 00:43	1
Benzene	0.43	U	1.0	0.43	ug/L			09/03/18 00:43	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/03/18 00:43	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/03/18 00:43	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/03/18 00:43	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/03/18 00:43	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/03/18 00:43	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/03/18 00:43	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/03/18 00:43	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/03/18 00:43	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/03/18 00:43	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/03/18 00:43	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/03/18 00:43	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/03/18 00:43	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/03/18 00:43	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/03/18 00:43	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/03/18 00:43	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/03/18 00:43	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/03/18 00:43	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/03/18 00:43	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/03/18 00:43	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/03/18 00:43	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/03/18 00:43	1
Styrene	0.42	U	1.0	0.42	ug/L			09/03/18 00:43	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/03/18 00:43	1
Toluene	0.38	U	1.0	0.38	ug/L			09/03/18 00:43	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/03/18 00:43	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/03/18 00:43	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/03/18 00:43	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/03/18 00:43	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/03/18 00:43	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/03/18 00:43	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/03/18 00:43*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*09/03/18 00:43*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/03/18 00:43*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*		*09/03/18 00:43*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*09/03/18 00:43*	*1*

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

Lab Sample ID: LCS 460-549424/3
Matrix: Water
Analysis Batch: 549424

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	17.1		ug/L		86	70 - 130
1,1,2,2-Tetrachloroethane	20.0	20.4		ug/L		102	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.1		ug/L		100	70 - 130
1,1,2-Trichloroethane	20.0	19.3		ug/L		96	70 - 130
1,1-Dichloroethane	20.0	22.1		ug/L		111	70 - 130
1,1-Dichloroethene	20.0	20.4		ug/L		102	70 - 130
1,2,3-Trichlorobenzene	20.0	18.0		ug/L		90	70 - 130
1,2,4-Trichlorobenzene	20.0	17.2		ug/L		86	70 - 130
1,2-Dichlorobenzene	20.0	19.6		ug/L		98	70 - 130
1,2-Dichloroethane	20.0	17.8		ug/L		89	70 - 130
1,2-Dichloropropane	20.0	22.4		ug/L		112	70 - 130
1,3-Dichlorobenzene	20.0	19.3		ug/L		96	70 - 130
1,4-Dichlorobenzene	20.0	18.9		ug/L		94	70 - 130
2-Butanone (MEK)	100	82.3		ug/L		82	40 - 160
2-Hexanone	100	87.0		ug/L		87	40 - 160
4-Methyl-2-pentanone (MIBK)	100	94.5		ug/L		94	40 - 160
Acetone	100	98.9		ug/L		99	40 - 160
Benzene	20.0	21.2		ug/L		106	70 - 130
Bromoform	20.0	17.3		ug/L		87	70 - 130
Bromomethane	20.0	20.6		ug/L		103	40 - 160
Carbon disulfide	20.0	20.9		ug/L		105	40 - 160
Carbon tetrachloride	20.0	17.4		ug/L		87	70 - 130
Chlorobenzene	20.0	19.1		ug/L		95	70 - 130
Chlorobromomethane	20.0	17.4		ug/L		87	70 - 130
Chlorodibromomethane	20.0	17.2		ug/L		86	70 - 130
Chloroethane	20.0	23.2		ug/L		116	40 - 160
Chloroform	20.0	18.0		ug/L		90	70 - 130
Chloromethane	20.0	19.7		ug/L		98	40 - 160
cis-1,2-Dichloroethene	20.0	18.7		ug/L		93	70 - 130
cis-1,3-Dichloropropene	20.0	21.0		ug/L		105	70 - 130
Cyclohexane	20.0	20.6		ug/L		103	70 - 130
Dichlorobromomethane	20.0	18.6		ug/L		93	70 - 130
Dichlorodifluoromethane	20.0	17.8		ug/L		89	40 - 160
Ethylbenzene	20.0	19.0		ug/L		95	70 - 130
Isopropylbenzene	20.0	19.3		ug/L		96	70 - 130
Methyl acetate	40.0	42.2		ug/L		106	70 - 130
Methyl tert-butyl ether	20.0	19.7		ug/L		99	70 - 130
Methylcyclohexane	20.0	20.0		ug/L		100	70 - 130
Methylene Chloride	20.0	19.5		ug/L		98	70 - 130
Styrene	20.0	18.7		ug/L		94	70 - 130
Tetrachloroethene	20.0	17.5		ug/L		88	70 - 130
Toluene	20.0	19.7		ug/L		99	70 - 130
trans-1,2-Dichloroethene	20.0	19.4		ug/L		97	70 - 130
trans-1,3-Dichloropropene	20.0	20.0		ug/L		100	70 - 130
Trichloroethene	20.0	18.2		ug/L		91	70 - 130
Trichlorofluoromethane	20.0	17.3		ug/L		87	40 - 160
Vinyl chloride	20.0	22.7		ug/L		114	70 - 130

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

Lab Sample ID: LCS 460-549424/3
Matrix: Water
Analysis Batch: 549424

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Xylenes, Total			40.0	38.2		ug/L		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 460-549424/4
Matrix: Water
Analysis Batch: 549424

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	17.7		ug/L		89	70 - 130	3	20
1,1,2,2-Tetrachloroethane			20.0	21.4		ug/L		107	70 - 130	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane			20.0	20.3		ug/L		102	70 - 130	1	20
1,1,2-Trichloroethane			20.0	19.9		ug/L		99	70 - 130	3	20
1,1-Dichloroethane			20.0	21.8		ug/L		109	70 - 130	2	20
1,1-Dichloroethene			20.0	20.1		ug/L		101	70 - 130	1	20
1,2,3-Trichlorobenzene			20.0	17.6		ug/L		88	70 - 130	2	20
1,2,4-Trichlorobenzene			20.0	17.4		ug/L		87	70 - 130	1	20
1,2-Dichlorobenzene			20.0	19.0		ug/L		95	70 - 130	3	20
1,2-Dichloroethane			20.0	18.6		ug/L		93	70 - 130	5	20
1,2-Dichloropropane			20.0	22.6		ug/L		113	70 - 130	0	20
1,3-Dichlorobenzene			20.0	19.4		ug/L		97	70 - 130	1	20
1,4-Dichlorobenzene			20.0	19.2		ug/L		96	70 - 130	1	20
2-Butanone (MEK)			100	88.2		ug/L		88	40 - 160	7	20
2-Hexanone			100	87.8		ug/L		88	40 - 160	1	20
4-Methyl-2-pentanone (MIBK)			100	96.0		ug/L		96	40 - 160	2	20
Acetone			100	98.6		ug/L		99	40 - 160	0	20
Benzene			20.0	21.9		ug/L		110	70 - 130	3	20
Bromoform			20.0	17.6		ug/L		88	70 - 130	2	20
Bromomethane			20.0	19.8		ug/L		99	40 - 160	4	20
Carbon disulfide			20.0	20.5		ug/L		103	40 - 160	2	20
Carbon tetrachloride			20.0	17.4		ug/L		87	70 - 130	0	20
Chlorobenzene			20.0	19.8		ug/L		99	70 - 130	3	20
Chlorobromomethane			20.0	17.6		ug/L		88	70 - 130	1	20
Chlorodibromomethane			20.0	17.6		ug/L		88	70 - 130	2	20
Chloroethane			20.0	23.8		ug/L		119	40 - 160	3	20
Chloroform			20.0	18.8		ug/L		94	70 - 130	4	20
Chloromethane			20.0	21.0		ug/L		105	40 - 160	6	20
cis-1,2-Dichloroethene			20.0	18.9		ug/L		94	70 - 130	1	20
cis-1,3-Dichloropropene			20.0	21.2		ug/L		106	70 - 130	1	20
Cyclohexane			20.0	21.0		ug/L		105	70 - 130	2	20
Dichlorobromomethane			20.0	18.2		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane			20.0	18.0		ug/L		90	40 - 160	1	20
Ethylbenzene			20.0	20.0		ug/L		100	70 - 130	5	20

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

Lab Sample ID: LCSD 460-549424/4
Matrix: Water
Analysis Batch: 549424

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Isopropylbenzene			20.0	20.0		ug/L		100	70 - 130	4	20
Methyl acetate			40.0	41.5		ug/L		104	70 - 130	2	20
Methyl tert-butyl ether			20.0	20.0		ug/L		100	70 - 130	1	20
Methylcyclohexane			20.0	20.2		ug/L		101	70 - 130	1	20
Methylene Chloride			20.0	19.7		ug/L		99	70 - 130	1	20
Styrene			20.0	18.9		ug/L		94	70 - 130	1	20
Tetrachloroethene			20.0	17.8		ug/L		89	70 - 130	2	20
Toluene			20.0	20.4		ug/L		102	70 - 130	4	20
trans-1,2-Dichloroethene			20.0	19.7		ug/L		99	70 - 130	2	20
trans-1,3-Dichloropropene			20.0	20.8		ug/L		104	70 - 130	4	20
Trichloroethene			20.0	19.0		ug/L		95	70 - 130	4	20
Trichlorofluoromethane			20.0	17.7		ug/L		88	40 - 160	2	20
Vinyl chloride			20.0	23.4		ug/L		117	70 - 130	3	20
Xylenes, Total			40.0	39.2		ug/L		98	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*89*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

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

Lab Sample ID: MB 460-550312/9
Matrix: Water
Analysis Batch: 550312

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/07/18 16:22	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/07/18 16:22	1
1,2,3-Trichloropropane	0.00321	J	0.030	0.0030	ug/L			09/07/18 16:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*09/07/18 16:22*	*1*

Lab Sample ID: LCS 460-550312/4
Matrix: Water
Analysis Batch: 550312

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane			0.0500	0.0650		ug/L		130	40 - 160
Ethylene Dibromide			0.0500	0.0424		ug/L		85	70 - 130
1,2,3-Trichloropropane			0.0500	0.0477		ug/L		95	40 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*70 - 130*

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

Lab Sample ID: LCSD 460-550312/5
Matrix: Water
Analysis Batch: 550312

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.0500	0.0616		ug/L		123	40 - 160	5	20
Ethylene Dibromide			0.0500	0.0416		ug/L		83	70 - 130	2	20
1,2,3-Trichloropropane			0.0500	0.0481		ug/L		96	40 - 160	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*113*		*70 - 130*

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

Lab Sample ID: MB 460-549018/1-A
Matrix: Water
Analysis Batch: 549280

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549018

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		08/31/18 17:11	09/01/18 22:20	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		08/31/18 17:11	09/01/18 22:20	1
2-Methylphenol	0.26	U	10	0.26	ug/L		08/31/18 17:11	09/01/18 22:20	1
4-Methylphenol	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/01/18 22:20	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/01/18 22:20	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/01/18 22:20	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		08/31/18 17:11	09/01/18 22:20	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		08/31/18 17:11	09/01/18 22:20	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		08/31/18 17:11	09/01/18 22:20	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		08/31/18 17:11	09/01/18 22:20	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		08/31/18 17:11	09/01/18 22:20	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		08/31/18 17:11	09/01/18 22:20	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		08/31/18 17:11	09/01/18 22:20	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		08/31/18 17:11	09/01/18 22:20	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		08/31/18 17:11	09/01/18 22:20	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		08/31/18 17:11	09/01/18 22:20	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		08/31/18 17:11	09/01/18 22:20	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		08/31/18 17:11	09/01/18 22:20	1
Isophorone	0.80	U	10	0.80	ug/L		08/31/18 17:11	09/01/18 22:20	1
Naphthalene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/01/18 22:20	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		08/31/18 17:11	09/01/18 22:20	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		08/31/18 17:11	09/01/18 22:20	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/01/18 22:20	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		08/31/18 17:11	09/01/18 22:20	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/01/18 22:20	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		08/31/18 17:11	09/01/18 22:20	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		08/31/18 17:11	09/01/18 22:20	1
Acenaphthylene	0.82	U	10	0.82	ug/L		08/31/18 17:11	09/01/18 22:20	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		08/31/18 17:11	09/01/18 22:20	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		08/31/18 17:11	09/01/18 22:20	1
Acenaphthene	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/01/18 22:20	1
Dibenzofuran	1.1	U	10	1.1	ug/L		08/31/18 17:11	09/01/18 22:20	1
2,4-Dinitrophenol	14	U	20	14	ug/L		08/31/18 17:11	09/01/18 22:20	1

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

Lab Sample ID: MB 460-549018/1-A
Matrix: Water
Analysis Batch: 549280

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549018

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.98	U	10	0.98	ug/L		08/31/18 17:11	09/01/18 22:20	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		08/31/18 17:11	09/01/18 22:20	1
Fluorene	0.91	U	10	0.91	ug/L		08/31/18 17:11	09/01/18 22:20	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		08/31/18 17:11	09/01/18 22:20	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		08/31/18 17:11	09/01/18 22:20	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/01/18 22:20	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		08/31/18 17:11	09/01/18 22:20	1
Phenanthrene	0.58	U	10	0.58	ug/L		08/31/18 17:11	09/01/18 22:20	1
Anthracene	0.63	U	10	0.63	ug/L		08/31/18 17:11	09/01/18 22:20	1
Carbazole	0.68	U	10	0.68	ug/L		08/31/18 17:11	09/01/18 22:20	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		08/31/18 17:11	09/01/18 22:20	1
Fluoranthene	0.84	U	10	0.84	ug/L		08/31/18 17:11	09/01/18 22:20	1
Pyrene	1.6	U	10	1.6	ug/L		08/31/18 17:11	09/01/18 22:20	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		08/31/18 17:11	09/01/18 22:20	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		08/31/18 17:11	09/01/18 22:20	1
Chrysene	0.91	U	2.0	0.91	ug/L		08/31/18 17:11	09/01/18 22:20	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		08/31/18 17:11	09/01/18 22:20	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		08/31/18 17:11	09/01/18 22:20	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		08/31/18 17:11	09/01/18 22:20	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		08/31/18 17:11	09/01/18 22:20	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		08/31/18 17:11	09/01/18 22:20	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		08/31/18 17:11	09/01/18 22:20	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		08/31/18 17:11	09/01/18 22:20	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		08/31/18 17:11	09/01/18 22:20	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/01/18 22:20	1
Acetophenone	0.79	U	10	0.79	ug/L		08/31/18 17:11	09/01/18 22:20	1
Benzaldehyde	0.59	U	10	0.59	ug/L		08/31/18 17:11	09/01/18 22:20	1
Caprolactam	0.68	U	10	0.68	ug/L		08/31/18 17:11	09/01/18 22:20	1
Atrazine	1.3	U	2.0	1.3	ug/L		08/31/18 17:11	09/01/18 22:20	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		08/31/18 17:11	09/01/18 22:20	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		08/31/18 17:11	09/01/18 22:20	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		08/31/18 17:11	09/01/18 22:20	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		08/31/18 17:11	09/01/18 22:20	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		08/31/18 17:11	09/01/18 22:20	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*08/31/18 17:11*	*09/01/18 22:20*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*108*		*30 - 130*	*08/31/18 17:11*	*09/01/18 22:20*	*1*
Phenol-d5 (Surr)	*34*		*15 - 110*	*08/31/18 17:11*	*09/01/18 22:20*	*1*
Terphenyl-d14 (Surr)	*112*		*30 - 130*	*08/31/18 17:11*	*09/01/18 22:20*	*1*
2,4,6-Tribromophenol (Surr)	*140*	*X*	*15 - 110*	*08/31/18 17:11*	*09/01/18 22:20*	*1*
2-Fluorophenol (Surr)	*52*		*15 - 110*	*08/31/18 17:11*	*09/01/18 22:20*	*1*
2-Fluorobiphenyl	*89*		*30 - 130*	*08/31/18 17:11*	*09/01/18 22:20*	*1*

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

Lab Sample ID: LCS 460-549018/2-A
Matrix: Water
Analysis Batch: 549280

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549018

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	80.0	40.5		ug/L		51	20 - 160
2-Chlorophenol	80.0	63.4		ug/L		79	70 - 130
2-Methylphenol	80.0	60.4		ug/L		76	70 - 130
4-Methylphenol	80.0	60.5		ug/L		76	20 - 160
2-Nitrophenol	80.0	77.2		ug/L		97	70 - 130
2,4-Dimethylphenol	80.0	67.9		ug/L		85	70 - 130
2,4-Dichlorophenol	80.0	75.0		ug/L		94	70 - 130
4-Chloro-3-methylphenol	80.0	75.6		ug/L		94	20 - 160
2,4,6-Trichlorophenol	80.0	76.0		ug/L		95	70 - 130
2,4,5-Trichlorophenol	80.0	71.2		ug/L		89	20 - 160
2,4-Dinitrotoluene	80.0	87.8		ug/L		110	70 - 130
4-Nitrophenol	160	103		ug/L		64	20 - 160
4,6-Dinitro-2-methylphenol	160	154		ug/L		96	20 - 160
Pentachlorophenol	160	151		ug/L		95	20 - 160
Bis(2-chloroethyl)ether	80.0	59.1		ug/L		74	70 - 130
N-Nitrosodi-n-propylamine	80.0	72.0		ug/L		90	70 - 130
Hexachloroethane	80.0	47.5		ug/L		59	20 - 160
Nitrobenzene	80.0	71.4		ug/L		89	70 - 130
Isophorone	80.0	73.7		ug/L		92	70 - 130
Naphthalene	80.0	62.0		ug/L		78	70 - 130
4-Chloroaniline	80.0	71.5		ug/L		89	20 - 160
Hexachlorobutadiene	80.0	60.9		ug/L		76	70 - 130
2-Methylnaphthalene	80.0	67.8		ug/L		85	70 - 130
Hexachlorocyclopentadiene	80.0	71.6		ug/L		90	20 - 160
2-Chloronaphthalene	80.0	66.7		ug/L		83	70 - 130
2-Nitroaniline	80.0	80.6		ug/L		101	20 - 160
Dimethyl phthalate	80.0	78.8		ug/L		99	70 - 130
Acenaphthylene	80.0	77.4		ug/L		97	70 - 130
2,6-Dinitrotoluene	80.0	80.1		ug/L		100	70 - 130
3-Nitroaniline	80.0	70.7		ug/L		88	20 - 160
Acenaphthene	80.0	69.0		ug/L		86	70 - 130
Dibenzofuran	80.0	75.4		ug/L		94	70 - 130
2,4-Dinitrophenol	160	159		ug/L		99	20 - 160
Diethyl phthalate	80.0	79.6		ug/L		99	70 - 130
4-Chlorophenyl phenyl ether	80.0	83.3		ug/L		104	70 - 130
Fluorene	80.0	81.7		ug/L		102	70 - 130
4-Nitroaniline	80.0	74.9		ug/L		94	20 - 160
N-Nitrosodiphenylamine	80.0	73.1		ug/L		91	70 - 130
4-Bromophenyl phenyl ether	80.0	78.1		ug/L		98	70 - 130
Hexachlorobenzene	80.0	82.2		ug/L		103	70 - 130
Phenanthrene	80.0	76.1		ug/L		95	70 - 130
Anthracene	80.0	75.0		ug/L		94	70 - 130
Carbazole	80.0	76.3		ug/L		95	70 - 130
Di-n-butyl phthalate	80.0	83.3		ug/L		104	70 - 130
Fluoranthene	80.0	82.2		ug/L		103	70 - 130
Pyrene	80.0	76.6		ug/L		96	70 - 130
Butyl benzyl phthalate	80.0	81.9		ug/L		102	70 - 130
Benzo[a]anthracene	80.0	80.6		ug/L		101	70 - 130

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

Lab Sample ID: LCS 460-549018/2-A
Matrix: Water
Analysis Batch: 549280

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549018

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	80.0	77.3		ug/L		97	70 - 130
Bis(2-ethylhexyl) phthalate	80.0	85.2		ug/L		106	70 - 130
Di-n-octyl phthalate	80.0	97.0		ug/L		121	70 - 130
Benzo[b]fluoranthene	80.0	79.1		ug/L		99	70 - 130
Benzo[k]fluoranthene	80.0	85.5		ug/L		107	70 - 130
Benzo[a]pyrene	80.0	82.2		ug/L		103	70 - 130
Indeno[1,2,3-cd]pyrene	80.0	75.6		ug/L		94	70 - 130
Dibenz(a,h)anthracene	80.0	75.1		ug/L		94	70 - 130
Benzo[g,h,i]perylene	80.0	68.6		ug/L		86	70 - 130
1,1'-Biphenyl	80.0	68.6		ug/L		86	70 - 130
Acetophenone	80.0	75.6		ug/L		95	70 - 130
2,2'-oxybis[1-chloropropane]	80.0	53.5	*	ug/L		67	70 - 130
1,2,4,5-Tetrachlorobenzene	80.0	70.6		ug/L		88	70 - 130
2,3,4,6-Tetrachlorophenol	80.0	81.1		ug/L		101	70 - 130
3,3'-Dichlorobenzidine	80.0	69.3		ug/L		87	70 - 130
Bis(2-chloroethoxy)methane	80.0	68.4		ug/L		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*91*		*30 - 130*
Phenol-d5 (Surr)	*46*		*15 - 110*
Terphenyl-d14 (Surr)	*94*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*116*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*57*		*15 - 110*
2-Fluorobiphenyl	*88*		*30 - 130*

Lab Sample ID: LCS 460-549018/4-A
Matrix: Water
Analysis Batch: 549280

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549018

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	160	172		ug/L		107	20 - 160
Caprolactam	160	63.9		ug/L		40	20 - 160
Atrazine	160	241	*	ug/L		150	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*107*		*30 - 130*
Phenol-d5 (Surr)	*37*		*15 - 110*
Terphenyl-d14 (Surr)	*120*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*155*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*53*		*15 - 110*
2-Fluorobiphenyl	*91*		*30 - 130*

Lab Sample ID: 460-163445-H-1-A MSD
Matrix: Water
Analysis Batch: 549280

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 549018

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	0.29	U	80.0	23.2		ug/L		29	20 - 160	8	20

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

Lab Sample ID: 460-163445-H-1-A MSD
Matrix: Water
Analysis Batch: 549280

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 549018

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chlorophenol	0.38	U	80.0	49.2	F1	ug/L		61	70 - 130	7	20
2-Methylphenol	0.26	U	80.0	43.5	F1	ug/L		54	70 - 130	9	20
4-Methylphenol	0.24	U	80.0	43.6		ug/L		54	20 - 160	5	20
2-Nitrophenol	0.75	U	80.0	68.2		ug/L		85	70 - 130	6	20
2,4-Dimethylphenol	0.24	U	80.0	59.4		ug/L		74	70 - 130	4	20
2,4-Dichlorophenol	0.42	U	80.0	66.2		ug/L		83	70 - 130	8	20
4-Chloro-3-methylphenol	0.58	U	80.0	69.7		ug/L		87	20 - 160	6	20
2,4,6-Trichlorophenol	0.30	U	80.0	73.1		ug/L		91	20 - 160	1	20
2,4,5-Trichlorophenol	0.28	U	80.0	68.2		ug/L		85	20 - 160	4	20
2,4-Dinitrotoluene	1.0	U	80.0	93.8		ug/L		117	70 - 130	3	20
4-Nitrophenol	0.69	U	160	76.7		ug/L		48	20 - 160	3	20
4,6-Dinitro-2-methylphenol	13	U	160	174		ug/L		109	20 - 160	2	20
Pentachlorophenol	1.4	U	160	173		ug/L		108	20 - 160	1	20
Bis(2-chloroethyl)ether	0.30	U	80.0	49.6	F1	ug/L		62	70 - 130	7	20
N-Nitrosodi-n-propylamine	0.43	U	80.0	63.6		ug/L		79	70 - 130	6	20
Hexachloroethane	1.2	U	80.0	37.2		ug/L		46	20 - 160	9	20
Nitrobenzene	0.57	U	80.0	61.2		ug/L		77	70 - 130	7	20
Isophorone	0.80	U	80.0	68.6		ug/L		86	70 - 130	5	20
Naphthalene	1.1	U	80.0	55.7		ug/L		70	70 - 130	6	20
4-Chloroaniline	1.9	U	80.0	65.7		ug/L		82	20 - 160	3	20
Hexachlorobutadiene	0.78	U	80.0	51.3	F1	ug/L		64	70 - 130	2	20
2-Methylnaphthalene	1.1	U	80.0	62.7		ug/L		78	70 - 130	4	20
Hexachlorocyclopentadiene	1.7	U	80.0	61.0		ug/L		76	20 - 160	4	20
2-Chloronaphthalene	1.2	U	80.0	64.0		ug/L		80	70 - 130	3	20
2-Nitroaniline	0.47	U	80.0	78.1		ug/L		98	20 - 160	5	20
Dimethyl phthalate	0.77	U	80.0	79.1		ug/L		99	70 - 130	4	20
Acenaphthylene	0.82	U	80.0	75.7		ug/L		95	70 - 130	3	20
2,6-Dinitrotoluene	0.39	U	80.0	83.1		ug/L		104	70 - 130	3	20
3-Nitroaniline	0.96	U	80.0	70.8		ug/L		88	20 - 160	1	20
Acenaphthene	1.1	U	80.0	65.5		ug/L		82	70 - 130	3	20
Dibenzofuran	1.1	U	80.0	74.2		ug/L		93	70 - 130	4	20
2,4-Dinitrophenol	14	U	160	182		ug/L		114	20 - 160	4	20
Diethyl phthalate	0.98	U	80.0	82.4		ug/L		103	70 - 130	4	20
4-Chlorophenyl phenyl ether	1.3	U	80.0	83.3		ug/L		104	70 - 130	3	20
Fluorene	0.91	U	80.0	80.4		ug/L		100	70 - 130	4	20
4-Nitroaniline	0.54	U	80.0	83.2		ug/L		104	20 - 160	1	20
N-Nitrosodiphenylamine	0.89	U	80.0	68.8		ug/L		86	70 - 130	4	20
4-Bromophenyl phenyl ether	0.75	U	80.0	76.8		ug/L		96	70 - 130	5	20
Hexachlorobenzene	0.40	U	80.0	82.5		ug/L		103	70 - 130	5	20
Phenanthrene	0.58	U	80.0	79.1		ug/L		99	70 - 130	4	20
Anthracene	0.63	U	80.0	80.4		ug/L		100	70 - 130	3	20
Carbazole	0.68	U	80.0	84.7		ug/L		106	70 - 130	1	20
Di-n-butyl phthalate	0.84	U	80.0	87.6		ug/L		109	70 - 130	4	20
Fluoranthene	0.84	U	80.0	91.9		ug/L		115	70 - 130	2	20
Pyrene	1.6	U	80.0	78.4		ug/L		98	70 - 130	5	20
Butyl benzyl phthalate	0.85	U	80.0	84.7		ug/L		106	70 - 130	3	20
Benzo[a]anthracene	0.59	U	80.0	86.3		ug/L		108	70 - 130	1	20
Chrysene	0.91	U	80.0	82.6		ug/L		103	70 - 130	4	20

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

Lab Sample ID: 460-163445-H-1-A MSD
Matrix: Water
Analysis Batch: 549280

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 549018

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	85.9		ug/L		107	70 - 130	5	20
Di-n-octyl phthalate	4.8	U	80.0	104		ug/L		130	70 - 130	1	20
Benzo[b]fluoranthene	1.1	U	80.0	85.8		ug/L		107	70 - 130	5	20
Benzo[k]fluoranthene	0.67	U	80.0	91.0		ug/L		114	70 - 130	2	20
Benzo[a]pyrene	0.41	U	80.0	87.5		ug/L		109	70 - 130	1	20
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	76.6		ug/L		96	70 - 130	2	20
Dibenz(a,h)anthracene	0.72	U	80.0	74.3		ug/L		93	70 - 130	0	20
Benzo[g,h,i]perylene	1.4	U	80.0	68.5		ug/L		86	70 - 130	1	20
1,1'-Biphenyl	1.2	U	80.0	66.3		ug/L		83	70 - 130	1	20
Acetophenone	0.79	U	80.0	65.0		ug/L		81	70 - 130	6	20
Benzaldehyde	0.59	U	160	116		ug/L		73	20 - 160	3	20
Caprolactam	0.68	U	160	44.4		ug/L		28	20 - 160	7	20
Atrazine	1.3	U *	160	206	E F2	ug/L		129	70 - 130	23	20
2,2'-oxybis[1-chloropropane]	0.63	U *	80.0	43.5	F1	ug/L		54	70 - 130	8	20
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	65.0		ug/L		81	70 - 130	3	20
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	83.2		ug/L		104	70 - 130	4	20
3,3'-Dichlorobenzidine	1.4	U	80.0	70.9		ug/L		89	70 - 130	12	20
Bis(2-chloroethoxy)methane	0.24	U	80.0	61.5		ug/L		77	70 - 130	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*82*		*30 - 130*
Phenol-d5 (Surr)	*24*		*15 - 110*
Terphenyl-d14 (Surr)	*82*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*123*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*35*		*15 - 110*
2-Fluorobiphenyl	*83*		*30 - 130*

Lab Sample ID: 460-163445-J-1-A MS
Matrix: Water
Analysis Batch: 549280

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 549018

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	0.29	U	80.0	25.1		ug/L		31	20 - 160
2-Chlorophenol	0.38	U	80.0	52.9	F1	ug/L		66	70 - 130
2-Methylphenol	0.26	U	80.0	47.6	F1	ug/L		59	70 - 130
4-Methylphenol	0.24	U	80.0	46.0		ug/L		58	20 - 160
2-Nitrophenol	0.75	U	80.0	72.7		ug/L		91	70 - 130
2,4-Dimethylphenol	0.24	U	80.0	62.1		ug/L		78	70 - 130
2,4-Dichlorophenol	0.42	U	80.0	72.0		ug/L		90	70 - 130
4-Chloro-3-methylphenol	0.58	U	80.0	74.2		ug/L		93	20 - 160
2,4,6-Trichlorophenol	0.30	U	80.0	73.9		ug/L		92	20 - 160
2,4,5-Trichlorophenol	0.28	U	80.0	71.2		ug/L		89	20 - 160
2,4-Dinitrotoluene	1.0	U	80.0	96.4		ug/L		121	70 - 130
4-Nitrophenol	0.69	U	160	78.7		ug/L		49	20 - 160
4,6-Dinitro-2-methylphenol	13	U	160	177		ug/L		111	20 - 160
Pentachlorophenol	1.4	U	160	170		ug/L		107	20 - 160
Bis(2-chloroethyl)ether	0.30	U	80.0	53.1	F1	ug/L		66	70 - 130
N-Nitrosodi-n-propylamine	0.43	U	80.0	67.6		ug/L		85	70 - 130

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

Lab Sample ID: 460-163445-J-1-A MS
Matrix: Water
Analysis Batch: 549280

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 549018

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachloroethane	1.2	U	80.0	40.5		ug/L		51	20 - 160
Nitrobenzene	0.57	U	80.0	65.8		ug/L		82	70 - 130
Isophorone	0.80	U	80.0	72.3		ug/L		90	70 - 130
Naphthalene	1.1	U	80.0	59.0		ug/L		74	70 - 130
4-Chloroaniline	1.9	U	80.0	67.7		ug/L		85	20 - 160
Hexachlorobutadiene	0.78	U	80.0	52.5	F1	ug/L		66	70 - 130
2-Methylnaphthalene	1.1	U	80.0	65.5		ug/L		82	70 - 130
Hexachlorocyclopentadiene	1.7	U	80.0	63.7		ug/L		80	20 - 160
2-Chloronaphthalene	1.2	U	80.0	66.0		ug/L		82	70 - 130
2-Nitroaniline	0.47	U	80.0	82.1		ug/L		103	20 - 160
Dimethyl phthalate	0.77	U	80.0	82.7		ug/L		103	70 - 130
Acenaphthylene	0.82	U	80.0	77.8		ug/L		97	70 - 130
2,6-Dinitrotoluene	0.39	U	80.0	85.3		ug/L		107	70 - 130
3-Nitroaniline	0.96	U	80.0	71.3		ug/L		89	20 - 160
Acenaphthene	1.1	U	80.0	67.6		ug/L		84	70 - 130
Dibenzofuran	1.1	U	80.0	76.9		ug/L		96	70 - 130
2,4-Dinitrophenol	14	U	160	189		ug/L		118	20 - 160
Diethyl phthalate	0.98	U	80.0	85.8		ug/L		107	70 - 130
4-Chlorophenyl phenyl ether	1.3	U	80.0	85.6		ug/L		107	70 - 130
Fluorene	0.91	U	80.0	83.7		ug/L		105	70 - 130
4-Nitroaniline	0.54	U	80.0	83.8		ug/L		105	20 - 160
N-Nitrosodiphenylamine	0.89	U	80.0	71.6		ug/L		90	70 - 130
4-Bromophenyl phenyl ether	0.75	U	80.0	81.0		ug/L		101	70 - 130
Hexachlorobenzene	0.40	U	80.0	86.8		ug/L		109	70 - 130
Phenanthrene	0.58	U	80.0	82.1		ug/L		103	70 - 130
Anthracene	0.63	U	80.0	82.8		ug/L		104	70 - 130
Carbazole	0.68	U	80.0	85.7		ug/L		107	70 - 130
Di-n-butyl phthalate	0.84	U	80.0	91.0		ug/L		114	70 - 130
Fluoranthene	0.84	U	80.0	93.6		ug/L		117	70 - 130
Pyrene	1.6	U	80.0	82.1		ug/L		103	70 - 130
Butyl benzyl phthalate	0.85	U	80.0	87.1		ug/L		109	70 - 130
Benzo[a]anthracene	0.59	U	80.0	85.3		ug/L		107	70 - 130
Chrysene	0.91	U	80.0	85.8		ug/L		107	70 - 130
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	90.1		ug/L		113	70 - 130
Di-n-octyl phthalate	4.8	U	80.0	105	F1	ug/L		132	70 - 130
Benzo[b]fluoranthene	1.1	U	80.0	89.8		ug/L		112	70 - 130
Benzo[k]fluoranthene	0.67	U	80.0	89.1		ug/L		111	70 - 130
Benzo[a]pyrene	0.41	U	80.0	88.0		ug/L		110	70 - 130
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	75.2		ug/L		94	70 - 130
Dibenz(a,h)anthracene	0.72	U	80.0	74.4		ug/L		93	70 - 130
Benzo[g,h,i]perylene	1.4	U	80.0	67.5		ug/L		84	70 - 130
1,1'-Biphenyl	1.2	U	80.0	67.0		ug/L		84	70 - 130
Acetophenone	0.79	U	80.0	69.1		ug/L		86	70 - 130
Benzaldehyde	0.59	U	160	121		ug/L		75	20 - 160
Caprolactam	0.68	U	160	47.8		ug/L		30	20 - 160
Atrazine	1.3	U *	160	163		ug/L		102	70 - 130
2,2'-oxybis[1-chloropropane]	0.63	U *	80.0	47.2	F1	ug/L		59	70 - 130
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	66.7		ug/L		83	70 - 130

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

Lab Sample ID: 460-163445-J-1-A MS
Matrix: Water
Analysis Batch: 549280

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 549018

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	86.6		ug/L		108	70 - 130
3,3'-Dichlorobenzidine	1.4	U	80.0	62.7		ug/L		78	70 - 130
Bis(2-chloroethoxy)methane	0.24	U	80.0	65.7		ug/L		82	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*89*		*30 - 130*
Phenol-d5 (Surr)	*27*		*15 - 110*
Terphenyl-d14 (Surr)	*82*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*131*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*38*		*15 - 110*
2-Fluorobiphenyl	*87*		*30 - 130*

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

Lab Sample ID: MB 460-549018/1-A
Matrix: Water
Analysis Batch: 549294

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549018

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		08/31/18 17:11	09/02/18 02:42	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		08/31/18 17:11	09/02/18 02:42	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		08/31/18 17:11	09/02/18 02:42	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		08/31/18 17:11	09/02/18 02:42	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		08/31/18 17:11	09/02/18 02:42	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		08/31/18 17:11	09/02/18 02:42	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		08/31/18 17:11	09/02/18 02:42	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		08/31/18 17:11	09/02/18 02:42	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		08/31/18 17:11	09/02/18 02:42	1

Lab Sample ID: LCS 460-549018/6-A
Matrix: Water
Analysis Batch: 549294

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549018

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.819		ug/L		102	70 - 130
Benzo[a]pyrene	0.800	0.846		ug/L		106	70 - 130
Benzo[b]fluoranthene	0.800	0.828		ug/L		104	70 - 130
Bis(2-chloroethyl)ether	0.800	0.927		ug/L		116	70 - 130
Dibenz(a,h)anthracene	0.800	1.24	*	ug/L		154	70 - 130
Hexachlorobenzene	0.800	0.659		ug/L		82	70 - 130
Indeno[1,2,3-cd]pyrene	0.800	1.05	*	ug/L		132	70 - 130
N-Nitrosodimethylamine	0.800	0.632		ug/L		79	20 - 160
Pentachlorophenol	1.60	1.36		ug/L		85	20 - 160

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

Lab Sample ID: LCSD 460-549018/7-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549294 — **Prep Batch: 549018**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.807		ug/L		101	70 - 130	1	20
Benzo[a]pyrene	0.800	0.884		ug/L		111	70 - 130	4	20
Benzo[b]fluoranthene	0.800	0.832		ug/L		104	70 - 130	1	20
Bis(2-chloroethyl)ether	0.800	0.903		ug/L		113	70 - 130	3	20
Dibenz(a,h)anthracene	0.800	1.15	*	ug/L		144	70 - 130	7	20
Hexachlorobenzene	0.800	0.661		ug/L		83	70 - 130	0	20
Indeno[1,2,3-cd]pyrene	0.800	0.989		ug/L		124	70 - 130	6	20
N-Nitrosodimethylamine	0.800	0.668		ug/L		84	20 - 160	6	20
Pentachlorophenol	1.60	1.66		ug/L		104	20 - 160	19	20

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 460-549186/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549259 — **Prep Batch: 549186**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/01/18 09:58	09/01/18 20:31	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*09/01/18 09:58*	*09/01/18 20:31*	*1*

Lab Sample ID: LCS 460-549186/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549259 — **Prep Batch: 549186**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	1.60	1.81		ug/L		113	10 - 200

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*35*		*10 - 200*

Lab Sample ID: LCSD 460-549186/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549259 — **Prep Batch: 549186**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	1.60	1.72		ug/L		107	10 - 200	5	50

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,4-Dioxane-d8	*35*		*10 - 200*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 460-549539/1-A
Matrix: Water
Analysis Batch: 549775

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549539

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 12:05	1
PCB-1016	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 12:05	1
PCB-1221	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 12:05	1
PCB-1232	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 12:05	1
PCB-1242	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 12:05	1
PCB-1248	0.12	U	0.40	0.12	ug/L		09/04/18 10:18	09/05/18 12:05	1
PCB-1254	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 12:05	1
PCB-1260	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 12:05	1
PCB-1262	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 12:05	1
PCB-1268	0.11	U	0.40	0.11	ug/L		09/04/18 10:18	09/05/18 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*87*		*30 - 150*	*09/04/18 10:18*	*09/05/18 12:05*	*1*
Tetrachloro-m-xylene	*93*		*30 - 150*	*09/04/18 10:18*	*09/05/18 12:05*	*1*
DCB Decachlorobiphenyl	*94*		*30 - 150*	*09/04/18 10:18*	*09/05/18 12:05*	*1*
DCB Decachlorobiphenyl	*101*		*30 - 150*	*09/04/18 10:18*	*09/05/18 12:05*	*1*

Lab Sample ID: LCS 460-549539/2-A
Matrix: Water
Analysis Batch: 549775

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549539

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	3.60		ug/L		90	40 - 140		
PCB-1016			4.00	3.80		ug/L		95	40 - 140		
PCB-1260			4.00	3.69		ug/L		92	40 - 140		
PCB-1260			4.00	4.06		ug/L		102	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*81*		*30 - 150*
Tetrachloro-m-xylene	*87*		*30 - 150*
DCB Decachlorobiphenyl	*90*		*30 - 150*
DCB Decachlorobiphenyl	*99*		*30 - 150*

Lab Sample ID: LCSD 460-549539/3-A
Matrix: Water
Analysis Batch: 549775

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 549539

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			4.00	3.65		ug/L		91	40 - 140	4	20
PCB-1016			4.00	3.48		ug/L		87	40 - 140	4	20
PCB-1260			4.00	4.19		ug/L		105	40 - 140	3	20
PCB-1260			4.00	3.92		ug/L		98	40 - 140	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*82*		*30 - 150*
Tetrachloro-m-xylene	*80*		*30 - 150*
DCB Decachlorobiphenyl	*99*		*30 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCSD 460-549539/3-A
Matrix: Water
Analysis Batch: 549775

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 549539

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*99*		*30 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 460-549067/3
Matrix: Water
Analysis Batch: 549067

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			08/31/18 19:30	1
Sulfate	0.33	U	0.60	0.33	mg/L			08/31/18 19:30	1

Lab Sample ID: LCS 460-549067/5
Matrix: Water
Analysis Batch: 549067

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.392		mg/L		93	90 - 110
Sulfate	7.50	6.939		mg/L		93	90 - 110

Lab Sample ID: LCSD 460-549067/6
Matrix: Water
Analysis Batch: 549067

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.50	1.363		mg/L		91	90 - 110	2	15
Sulfate	7.50	6.804		mg/L		91	90 - 110	2	15

Lab Sample ID: MB 460-549198/3
Matrix: Water
Analysis Batch: 549198

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			09/02/18 00:19	1
Sulfate	0.33	U	0.60	0.33	mg/L			09/02/18 00:19	1

Lab Sample ID: LCS 460-549198/5
Matrix: Water
Analysis Batch: 549198

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.452		mg/L		97	90 - 110
Sulfate	7.50	7.472		mg/L		100	90 - 110

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 460-549198/6
Matrix: Water
Analysis Batch: 549198

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			1.50	1.464		mg/L		98	90 - 110	1	15
Sulfate			7.50	7.526		mg/L		100	90 - 110	1	15

Method: 9056A - Anions, Ion Chromatography - DL

Lab Sample ID: 460-163634-1 MS
Matrix: Water
Analysis Batch: 549198

Client Sample ID: RW8(163-173)-082918
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride - DL	5.90	D F1	1.50	7.015	F1	mg/L		74	90 - 110		
Sulfate - DL	110	D	7.50	112.9	4	mg/L		34	90 - 110		

Lab Sample ID: 460-163634-1 MSD
Matrix: Water
Analysis Batch: 549198

Client Sample ID: RW8(163-173)-082918
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride - DL	5.90	D F1	1.50	7.064	F1	mg/L		77	90 - 110	1	15
Sulfate - DL	110	D	7.50	113.7	4	mg/L		44	90 - 110	1	15

Lab Sample ID: 460-163634-1 DU
Matrix: Water
Analysis Batch: 549198

Client Sample ID: RW8(163-173)-082918
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride - DL	5.90	D F1		5.910		mg/L				0.1	15
Sulfate - DL	110	D		110.4		mg/L				0.05	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 460-550741/1-A ^2
Matrix: Water
Analysis Batch: 550921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550741

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/09/18 05:50	09/10/18 00:15	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/09/18 05:50	09/10/18 00:15	2
Barium	1.1	U	4.0	1.1	ug/L		09/09/18 05:50	09/10/18 00:15	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/09/18 05:50	09/10/18 00:15	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/09/18 05:50	09/10/18 00:15	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/09/18 05:50	09/10/18 00:15	2
Chromium	1.3	U	4.0	1.3	ug/L		09/09/18 05:50	09/10/18 00:15	2
Copper	1.9	U	4.0	1.9	ug/L		09/09/18 05:50	09/10/18 00:15	2
Manganese	2.7	U	8.0	2.7	ug/L		09/09/18 05:50	09/10/18 00:15	2
Nickel	1.3	U	4.0	1.3	ug/L		09/09/18 05:50	09/10/18 00:15	2
Lead	0.37	U	1.2	0.37	ug/L		09/09/18 05:50	09/10/18 00:15	2
Antimony	0.62	U	2.0	0.62	ug/L		09/09/18 05:50	09/10/18 00:15	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-550741/1-A ^2
Matrix: Water
Analysis Batch: 550921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550741

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.69	U	10.0	0.69	ug/L		09/09/18 05:50	09/10/18 00:15	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/09/18 05:50	09/10/18 00:15	2
Zinc	5.4	U	16.0	5.4	ug/L		09/09/18 05:50	09/10/18 00:15	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/09/18 05:50	09/10/18 00:15	2
Sodium	75.7	U	200	75.7	ug/L		09/09/18 05:50	09/10/18 00:15	2
Magnesium	65.7	U	200	65.7	ug/L		09/09/18 05:50	09/10/18 00:15	2
Potassium	64.9	U	200	64.9	ug/L		09/09/18 05:50	09/10/18 00:15	2
Calcium	67.6	U	200	67.6	ug/L		09/09/18 05:50	09/10/18 00:15	2
Iron	45.7	U	120	45.7	ug/L		09/09/18 05:50	09/10/18 00:15	2
Thallium	0.24	U	0.80	0.24	ug/L		09/09/18 05:50	09/10/18 00:15	2

Lab Sample ID: LCS 460-550741/2-A ^2
Matrix: Water
Analysis Batch: 550921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550741

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	25.16		ug/L		101	80 - 120
Arsenic	50.0	51.14		ug/L		102	80 - 120
Barium	50.0	50.88		ug/L		102	80 - 120
Beryllium	25.0	23.85		ug/L		95	80 - 120
Cadmium	25.0	24.54		ug/L		98	80 - 120
Cobalt	25.0	25.57		ug/L		102	80 - 120
Chromium	50.0	50.97		ug/L		102	80 - 120
Copper	50.0	52.34		ug/L		105	80 - 120
Manganese	250	255.8		ug/L		102	80 - 120
Nickel	50.0	50.74		ug/L		101	80 - 120
Lead	25.0	25.37		ug/L		101	80 - 120
Antimony	25.0	25.72		ug/L		103	80 - 120
Selenium	50.0	52.68		ug/L		105	80 - 120
Vanadium	50.0	51.10		ug/L		102	80 - 120
Zinc	250	249.4		ug/L		100	80 - 120
Aluminum	2500	2527		ug/L		101	80 - 120
Sodium	2500	2662		ug/L		106	80 - 120
Magnesium	2500	2530		ug/L		101	80 - 120
Potassium	2500	2497		ug/L		100	80 - 120
Calcium	2500	2651		ug/L		106	80 - 120
Iron	2500	2536		ug/L		101	80 - 120
Thallium	20.0	20.10		ug/L		100	80 - 120

Lab Sample ID: 460-164076-D-1-C MS ^2
Matrix: Water
Analysis Batch: 550921

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 550741

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	25.0	24.58		ug/L		98	75 - 125
Arsenic	7.0		50.0	53.06		ug/L		92	75 - 125
Barium	97.2		50.0	147.2		ug/L		100	75 - 125
Beryllium	0.26	U	25.0	23.27		ug/L		93	75 - 125
Cadmium	0.61	U	25.0	23.63		ug/L		95	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-164076-D-1-C MS ^2
Matrix: Water
Analysis Batch: 550921

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 550741

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	1.4	J	25.0	25.53		ug/L		97	75 - 125
Chromium	8.4		50.0	57.21		ug/L		98	75 - 125
Copper	2.0	J	50.0	50.93		ug/L		98	75 - 125
Manganese	2410		250	2643	4	ug/L		94	75 - 125
Nickel	4.6		50.0	52.63		ug/L		96	75 - 125
Lead	0.37	U	25.0	25.44		ug/L		102	75 - 125
Antimony	1.0	J	25.0	26.35		ug/L		101	75 - 125
Selenium	0.69	U	50.0	46.27		ug/L		93	75 - 125
Vanadium	1.9	J	50.0	51.88		ug/L		100	75 - 125
Zinc	5.4	U	250	241.8		ug/L		97	75 - 125
Aluminum	31.2	J	2500	2484		ug/L		98	75 - 125
Sodium	225000		2500	225800	4	ug/L		33	75 - 125
Magnesium	25300		2500	27430	4	ug/L		85	75 - 125
Potassium	8270		2500	10630		ug/L		94	75 - 125
Calcium	55700		2500	57750	4	ug/L		81	75 - 125
Iron	37800		2500	39960	4	ug/L		88	75 - 125
Thallium	0.24	U	20.0	20.10		ug/L		100	75 - 125

Lab Sample ID: 460-164076-D-1-B DU ^2
Matrix: Water
Analysis Batch: 550921

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 550741

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	7.0		7.17		ug/L		3	20
Barium	97.2		103.9		ug/L		7	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	1.4	J	1.43	J	ug/L		3	20
Chromium	8.4		8.92		ug/L		6	20
Copper	2.0	J	4.99	F5	ug/L		86	20
Manganese	2410		2572		ug/L		7	20
Nickel	4.6		4.93		ug/L		8	20
Lead	0.37	U	0.37	U	ug/L		NC	20
Antimony	1.0	J	1.09	J	ug/L		9	20
Selenium	0.69	U	0.69	U	ug/L		NC	20
Vanadium	1.9	J	1.99	J	ug/L		7	20
Zinc	5.4	U	5.4	U	ug/L		NC	20
Aluminum	31.2	J	38.36	J F5	ug/L		21	20
Sodium	225000		239300		ug/L		6	20
Magnesium	25300		27190		ug/L		7	20
Potassium	8270		8812		ug/L		6	20
Calcium	55700		59550		ug/L		7	20
Iron	37800		40320		ug/L		7	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-551569/2-A
Matrix: Water
Analysis Batch: 551612

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551569

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.00	4.79		ug/L		96	80 - 120
Arsenic	10.0	11.58		ug/L		116	80 - 120
Barium	10.0	10.83		ug/L		108	80 - 120
Beryllium	5.00	5.53		ug/L		111	80 - 120
Cadmium	5.00	5.39		ug/L		108	80 - 120
Cobalt	5.00	5.51		ug/L		110	80 - 120
Chromium	10.0	10.89		ug/L		109	80 - 120
Copper	10.0	10.94		ug/L		109	80 - 120
Manganese	50.0	54.84		ug/L		110	80 - 120
Nickel	10.0	10.85		ug/L		108	80 - 120
Lead	5.00	5.43		ug/L		109	80 - 120
Antimony	5.00	5.51		ug/L		110	80 - 120
Selenium	10.0	10.74		ug/L		107	80 - 120
Vanadium	10.0	10.68		ug/L		107	80 - 120
Zinc	50.0	52.34		ug/L		105	80 - 120
Aluminum	500	551.5		ug/L		110	80 - 120
Sodium	500	549.6		ug/L		110	80 - 120
Magnesium	500	534.5		ug/L		107	80 - 120
Potassium	500	543.3		ug/L		109	80 - 120
Calcium	500	584.6		ug/L		117	80 - 120
Iron	500	588.2		ug/L		118	80 - 120
Thallium	4.00	4.22		ug/L		106	80 - 120

Lab Sample ID: MB 460-550920/1-B
Matrix: Water
Analysis Batch: 551612

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 551569

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.68	U	1.0	0.68	ug/L		09/12/18 11:55	09/12/18 14:40	1
Arsenic	0.38	U	1.0	0.38	ug/L		09/12/18 11:55	09/12/18 14:40	1
Barium	0.57	U	2.0	0.57	ug/L		09/12/18 11:55	09/12/18 14:40	1
Beryllium	0.13	U	0.40	0.13	ug/L		09/12/18 11:55	09/12/18 14:40	1
Cadmium	0.31	U	1.0	0.31	ug/L		09/12/18 11:55	09/12/18 14:40	1
Cobalt	0.64	U	2.0	0.64	ug/L		09/12/18 11:55	09/12/18 14:40	1
Chromium	0.66	U	2.0	0.66	ug/L		09/12/18 11:55	09/12/18 14:40	1
Copper	0.95	U	2.0	0.95	ug/L		09/12/18 11:55	09/12/18 14:40	1
Manganese	1.3	U	4.0	1.3	ug/L		09/12/18 11:55	09/12/18 14:40	1
Nickel	0.65	U	2.0	0.65	ug/L		09/12/18 11:55	09/12/18 14:40	1
Lead	0.19	U	0.60	0.19	ug/L		09/12/18 11:55	09/12/18 14:40	1
Antimony	0.31	U	1.0	0.31	ug/L		09/12/18 11:55	09/12/18 14:40	1
Selenium	0.35	U	5.0	0.35	ug/L		09/12/18 11:55	09/12/18 14:40	1
Vanadium	0.59	U	2.0	0.59	ug/L		09/12/18 11:55	09/12/18 14:40	1
Zinc	2.7	U	8.0	2.7	ug/L		09/12/18 11:55	09/12/18 14:40	1
Aluminum	7.5	U	20.0	7.5	ug/L		09/12/18 11:55	09/12/18 14:40	1
Sodium	37.9	U	100	37.9	ug/L		09/12/18 11:55	09/12/18 14:40	1
Magnesium	32.9	U	100	32.9	ug/L		09/12/18 11:55	09/12/18 14:40	1
Potassium	32.5	U	100	32.5	ug/L		09/12/18 11:55	09/12/18 14:40	1
Calcium	33.8	U	100	33.8	ug/L		09/12/18 11:55	09/12/18 14:40	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-550920/1-B
Matrix: Water
Analysis Batch: 551612

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 551569

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	22.9	U	60.0	22.9	ug/L		09/12/18 11:55	09/12/18 14:40	1
Thallium	0.12	U	0.40	0.12	ug/L		09/12/18 11:55	09/12/18 14:40	1

Lab Sample ID: 460-163597-H-2-D MS ^2
Matrix: Water
Analysis Batch: 551612

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 551569

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	10.0	10.59		ug/L		106	75 - 125
Arsenic	0.77	U	20.0	21.89		ug/L		109	75 - 125
Barium	29.7		20.0	50.77		ug/L		105	75 - 125
Beryllium	0.59	J	10.0	10.59		ug/L		100	75 - 125
Cadmium	0.62	J	10.0	10.96		ug/L		103	75 - 125
Cobalt	1.3	U	10.0	10.38		ug/L		104	75 - 125
Chromium	1.3	U	20.0	19.95		ug/L		100	75 - 125
Copper	2.8	J	20.0	24.23		ug/L		107	75 - 125
Manganese	1290		100	1397	4	ug/L		104	75 - 125
Nickel	28.5		20.0	48.93		ug/L		102	75 - 125
Lead	0.37	U	10.0	10.34		ug/L		103	75 - 125
Antimony	0.62	U	10.0	10.29		ug/L		103	75 - 125
Selenium	0.69	U	20.0	19.51		ug/L		98	75 - 125
Vanadium	1.2	U	20.0	20.01		ug/L		100	75 - 125
Zinc	51.7		100	149.3		ug/L		98	75 - 125
Aluminum	47.2		1000	1036		ug/L		99	75 - 125
Sodium	78600		1000	79310	4	ug/L		75	75 - 125
Magnesium	9280		1000	10220	4	ug/L		94	75 - 125
Potassium	1640		1000	2649		ug/L		101	75 - 125
Calcium	33400		1000	34220	4	ug/L		86	75 - 125
Iron	45.7	U	1000	1069		ug/L		107	75 - 125
Thallium	0.24	U	8.00	8.21		ug/L		103	75 - 125

Lab Sample ID: 460-163597-H-2-C DU ^2
Matrix: Water
Analysis Batch: 551612

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 551569

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	0.77	U	0.77	U	ug/L		NC	20
Barium	29.7		29.81		ug/L		0.5	20
Beryllium	0.59	J	0.906	F5	ug/L		42	20
Cadmium	0.62	J	0.61	U	ug/L		NC	20
Cobalt	1.3	U	1.3	U	ug/L		NC	20
Chromium	1.3	U	1.3	U	ug/L		NC	20
Copper	2.8	J	2.82	J	ug/L		1	20
Manganese	1290		1330		ug/L		3	20
Nickel	28.5		29.55		ug/L		4	20
Lead	0.37	U	0.37	U	ug/L		NC	20
Antimony	0.62	U	0.62	U	ug/L		NC	20
Selenium	0.69	U	0.69	U	ug/L		NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163597-H-2-C DU ^2
Matrix: Water
Analysis Batch: 551612

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 551569

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Vanadium	1.2	U	1.2	U	ug/L		NC	20
Zinc	51.7		53.48		ug/L		3	20
Aluminum	47.2		44.44		ug/L		6	20
Sodium	78600		80470		ug/L		2	20
Magnesium	9280		9560		ug/L		3	20
Potassium	1640		1686		ug/L		3	20
Calcium	33400		34020		ug/L		2	20
Iron	45.7	U	45.7	U	ug/L		NC	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 460-550004/10-A
Matrix: Water
Analysis Batch: 550101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550004

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/06/18 05:32	09/06/18 08:49	1

Lab Sample ID: LCS 460-550004/11-A
Matrix: Water
Analysis Batch: 550101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550004

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	1.01		ug/L		101	80 - 120

Lab Sample ID: 460-163634-1 MS
Matrix: Water
Analysis Batch: 550101

Client Sample ID: RW8(163-173)-082918
Prep Type: Total/NA
Prep Batch: 550004

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	0.996		ug/L		100	75 - 125

Lab Sample ID: 460-163634-1 DU
Matrix: Water
Analysis Batch: 550101

Client Sample ID: RW8(163-173)-082918
Prep Type: Total/NA
Prep Batch: 550004

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Lab Sample ID: LCS 460-550012/2-A
Matrix: Water
Analysis Batch: 550101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550012

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.992		ug/L		99	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 460-550003/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 550101 — **Prep Batch: 550012**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/06/18 06:02	09/06/18 09:44	1

Lab Sample ID: 460-163366-D-4-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 550101 — **Prep Batch: 550012**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	0.979		ug/L		98	75 - 125

Lab Sample ID: 460-163366-C-4-B DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 550101 — **Prep Batch: 550012**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 460-550885/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 550966 — **Prep Batch: 550885**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 12:53	1

Lab Sample ID: LCS 460-550885/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 550966 — **Prep Batch: 550885**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0993		mg/L		99	85 - 115

Lab Sample ID: 460-163473-A-4-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 550966 — **Prep Batch: 550885**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0020	U	0.200	0.187		mg/L		94	75 - 125

Lab Sample ID: 460-163473-A-4-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 550966 — **Prep Batch: 550885**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U	0.200	0.185		mg/L		93	75 - 125	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 460-549615/2
Matrix: Water
Analysis Batch: 549615

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			09/04/18 11:04	1
Alkalinity	5.0	U	5.0	5.0	mg/L			09/04/18 11:04	1

Lab Sample ID: LCSSRM 460-549615/3
Matrix: Water
Analysis Batch: 549615

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	384	368.2		mg/L		95.9	84.9 - 114.8

Lab Sample ID: 460-163741-G-3 DU
Matrix: Water
Analysis Batch: 549615

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	190		189.9		mg/L		0.09	10
Alkalinity	190		189.9		mg/L		0.09	10

GC/MS VOA

Analysis Batch: 549256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	8260C	
MB 460-549256/9	Method Blank	Total/NA	Water	8260C	
LCS 460-549256/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-549256/7	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 549424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-2	RW8(204-214)-082918	Total/NA	Water	8260C	
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	8260C	
460-163634-4	RW9(206-216)-082918	Total/NA	Water	8260C	
460-163634-5	TB-05-083018	Total/NA	Water	8260C	
MB 460-549424/7	Method Blank	Total/NA	Water	8260C	
LCS 460-549424/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-549424/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 550312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	8260C SIM	
460-163634-2	RW8(204-214)-082918	Total/NA	Water	8260C SIM	
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	8260C SIM	
460-163634-4	RW9(206-216)-082918	Total/NA	Water	8260C SIM	
460-163634-5	TB-05-083018	Total/NA	Water	8260C SIM	
MB 460-550312/9	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-550312/4	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-550312/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

GC/MS Semi VOA

Prep Batch: 549018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	3510C	
460-163634-2	RW8(204-214)-082918	Total/NA	Water	3510C	
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	3510C	
460-163634-4	RW9(206-216)-082918	Total/NA	Water	3510C	
MB 460-549018/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-549018/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-549018/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-549018/6-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-549018/7-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-163445-H-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	
460-163445-J-1-A MS	Matrix Spike	Total/NA	Water	3510C	

Prep Batch: 549186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	3510C	
460-163634-2	RW8(204-214)-082918	Total/NA	Water	3510C	
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	3510C	
460-163634-4	RW9(206-216)-082918	Total/NA	Water	3510C	
MB 460-549186/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-549186/2-A	Lab Control Sample	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 549186 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 460-549186/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 549259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	8270D SIM ID	549186
460-163634-2	RW8(204-214)-082918	Total/NA	Water	8270D SIM ID	549186
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	8270D SIM ID	549186
460-163634-4	RW9(206-216)-082918	Total/NA	Water	8270D SIM ID	549186
MB 460-549186/1-A	Method Blank	Total/NA	Water	8270D SIM ID	549186
LCS 460-549186/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	549186
LCSD 460-549186/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM ID	549186

Analysis Batch: 549280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	8270D	549018
460-163634-2	RW8(204-214)-082918	Total/NA	Water	8270D	549018
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	8270D	549018
460-163634-4	RW9(206-216)-082918	Total/NA	Water	8270D	549018
MB 460-549018/1-A	Method Blank	Total/NA	Water	8270D	549018
LCS 460-549018/2-A	Lab Control Sample	Total/NA	Water	8270D	549018
LCS 460-549018/4-A	Lab Control Sample	Total/NA	Water	8270D	549018
460-163445-H-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	8270D	549018
460-163445-J-1-A MS	Matrix Spike	Total/NA	Water	8270D	549018

Analysis Batch: 549294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	8270D SIM	549018
460-163634-2	RW8(204-214)-082918	Total/NA	Water	8270D SIM	549018
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	8270D SIM	549018
460-163634-4	RW9(206-216)-082918	Total/NA	Water	8270D SIM	549018
MB 460-549018/1-A	Method Blank	Total/NA	Water	8270D SIM	549018
LCS 460-549018/6-A	Lab Control Sample	Total/NA	Water	8270D SIM	549018
LCSD 460-549018/7-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	549018

GC Semi VOA

Prep Batch: 549539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	3510C	
460-163634-2	RW8(204-214)-082918	Total/NA	Water	3510C	
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	3510C	
460-163634-4	RW9(206-216)-082918	Total/NA	Water	3510C	
MB 460-549539/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-549539/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-549539/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 549775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	8082A	549539
460-163634-2	RW8(204-214)-082918	Total/NA	Water	8082A	549539

GC Semi VOA (Continued)

Analysis Batch: 549775 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	8082A	549539
460-163634-4	RW9(206-216)-082918	Total/NA	Water	8082A	549539
MB 460-549539/1-A	Method Blank	Total/NA	Water	8082A	549539
LCS 460-549539/2-A	Lab Control Sample	Total/NA	Water	8082A	549539
LCSD 460-549539/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	549539

HPLC/IC

Analysis Batch: 549067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	9056A	
MB 460-549067/3	Method Blank	Total/NA	Water	9056A	
LCS 460-549067/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-549067/6	Lab Control Sample Dup	Total/NA	Water	9056A	

Analysis Batch: 549198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1 - DL	RW8(163-173)-082918	Total/NA	Water	9056A	
460-163634-2 - DL	RW8(204-214)-082918	Total/NA	Water	9056A	
460-163634-4 - DL	RW9(206-216)-082918	Total/NA	Water	9056A	
460-163634-4 - DL2	RW9(206-216)-082918	Total/NA	Water	9056A	
MB 460-549198/3	Method Blank	Total/NA	Water	9056A	
LCS 460-549198/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-549198/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163634-1 MS - DL	RW8(163-173)-082918	Total/NA	Water	9056A	
460-163634-1 MSD - DL	RW8(163-173)-082918	Total/NA	Water	9056A	
460-163634-1 DU - DL	RW8(163-173)-082918	Total/NA	Water	9056A	

Metals

Filtration Batch: 550003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Dissolved	Water	FILTRATION	
460-163634-2	RW8(204-214)-082918	Dissolved	Water	FILTRATION	
460-163634-3	RW9A(85-95)-082918	Dissolved	Water	FILTRATION	
460-163634-4	RW9(206-216)-082918	Dissolved	Water	FILTRATION	
MB 460-550003/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163366-D-4-B MS	Matrix Spike	Dissolved	Water	FILTRATION	
460-163366-C-4-B DU	Duplicate	Dissolved	Water	FILTRATION	

Prep Batch: 550004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	7470A	
460-163634-2	RW8(204-214)-082918	Total/NA	Water	7470A	
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	7470A	
460-163634-4	RW9(206-216)-082918	Total/NA	Water	7470A	
MB 460-550004/10-A	Method Blank	Total/NA	Water	7470A	
LCS 460-550004/11-A	Lab Control Sample	Total/NA	Water	7470A	
460-163634-1 MS	RW8(163-173)-082918	Total/NA	Water	7470A	
460-163634-1 DU	RW8(163-173)-082918	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 550012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Dissolved	Water	7470A	550003
460-163634-2	RW8(204-214)-082918	Dissolved	Water	7470A	550003
460-163634-3	RW9A(85-95)-082918	Dissolved	Water	7470A	550003
460-163634-4	RW9(206-216)-082918	Dissolved	Water	7470A	550003
MB 460-550003/1-B	Method Blank	Dissolved	Water	7470A	550003
LCS 460-550012/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163366-D-4-B MS	Matrix Spike	Dissolved	Water	7470A	550003
460-163366-C-4-B DU	Duplicate	Dissolved	Water	7470A	550003

Analysis Batch: 550101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Dissolved	Water	7470A	550012
460-163634-1	RW8(163-173)-082918	Total/NA	Water	7470A	550004
460-163634-2	RW8(204-214)-082918	Dissolved	Water	7470A	550012
460-163634-2	RW8(204-214)-082918	Total/NA	Water	7470A	550004
460-163634-3	RW9A(85-95)-082918	Dissolved	Water	7470A	550012
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	7470A	550004
460-163634-4	RW9(206-216)-082918	Dissolved	Water	7470A	550012
460-163634-4	RW9(206-216)-082918	Total/NA	Water	7470A	550004
MB 460-550003/1-B	Method Blank	Dissolved	Water	7470A	550012
MB 460-550004/10-A	Method Blank	Total/NA	Water	7470A	550004
LCS 460-550004/11-A	Lab Control Sample	Total/NA	Water	7470A	550004
LCS 460-550012/2-A	Lab Control Sample	Total/NA	Water	7470A	550012
460-163366-D-4-B MS	Matrix Spike	Dissolved	Water	7470A	550012
460-163634-1 MS	RW8(163-173)-082918	Total/NA	Water	7470A	550004
460-163366-C-4-B DU	Duplicate	Dissolved	Water	7470A	550012
460-163634-1 DU	RW8(163-173)-082918	Total/NA	Water	7470A	550004

Prep Batch: 550741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	3010A	
460-163634-2	RW8(204-214)-082918	Total/NA	Water	3010A	
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	3010A	
460-163634-4	RW9(206-216)-082918	Total/NA	Water	3010A	
MB 460-550741/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-550741/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-164076-D-1-C MS ^2	Matrix Spike	Total/NA	Water	3010A	
460-164076-D-1-B DU ^2	Duplicate	Total/NA	Water	3010A	

Filtration Batch: 550920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Dissolved	Water	FILTRATION	
460-163634-2	RW8(204-214)-082918	Dissolved	Water	FILTRATION	
460-163634-3	RW9A(85-95)-082918	Dissolved	Water	FILTRATION	
460-163634-4	RW9(206-216)-082918	Dissolved	Water	FILTRATION	
MB 460-550920/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163597-H-2-D MS ^2	Matrix Spike	Dissolved	Water	FILTRATION	
460-163597-H-2-C DU ^2	Duplicate	Dissolved	Water	FILTRATION	

Metals (Continued)

Analysis Batch: 550921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	6020B	550741
460-163634-2	RW8(204-214)-082918	Total/NA	Water	6020B	550741
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	6020B	550741
460-163634-4	RW9(206-216)-082918	Total/NA	Water	6020B	550741
MB 460-550741/1-A ^2	Method Blank	Total/NA	Water	6020B	550741
LCS 460-550741/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	550741
460-164076-D-1-C MS ^2	Matrix Spike	Total/NA	Water	6020B	550741
460-164076-D-1-B DU ^2	Duplicate	Total/NA	Water	6020B	550741

Prep Batch: 551569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Dissolved	Water	3010A	550920
460-163634-2	RW8(204-214)-082918	Dissolved	Water	3010A	550920
460-163634-3	RW9A(85-95)-082918	Dissolved	Water	3010A	550920
460-163634-4	RW9(206-216)-082918	Dissolved	Water	3010A	550920
MB 460-550920/1-B	Method Blank	Dissolved	Water	3010A	550920
LCS 460-551569/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-163597-H-2-D MS ^2	Matrix Spike	Dissolved	Water	3010A	550920
460-163597-H-2-C DU ^2	Duplicate	Dissolved	Water	3010A	550920

Analysis Batch: 551612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Dissolved	Water	6020B	551569
460-163634-2	RW8(204-214)-082918	Dissolved	Water	6020B	551569
460-163634-3	RW9A(85-95)-082918	Dissolved	Water	6020B	551569
460-163634-4	RW9(206-216)-082918	Dissolved	Water	6020B	551569
MB 460-550920/1-B	Method Blank	Dissolved	Water	6020B	551569
LCS 460-551569/2-A	Lab Control Sample	Total/NA	Water	6020B	551569
460-163597-H-2-D MS ^2	Matrix Spike	Dissolved	Water	6020B	551569
460-163597-H-2-C DU ^2	Duplicate	Dissolved	Water	6020B	551569

General Chemistry

Analysis Batch: 549615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	SM 2320B	
460-163634-2	RW8(204-214)-082918	Total/NA	Water	SM 2320B	
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	SM 2320B	
460-163634-4	RW9(206-216)-082918	Total/NA	Water	SM 2320B	
MB 460-549615/2	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-549615/3	Lab Control Sample	Total/NA	Water	SM 2320B	
460-163741-G-3 DU	Duplicate	Total/NA	Water	SM 2320B	

Prep Batch: 550885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	9012B	
460-163634-2	RW8(204-214)-082918	Total/NA	Water	9012B	
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	9012B	
460-163634-4	RW9(206-216)-082918	Total/NA	Water	9012B	
MB 460-550885/1-A	Method Blank	Total/NA	Water	9012B	

General Chemistry (Continued)

Prep Batch: 550885 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 460-550885/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163473-A-4-B MS	Matrix Spike	Total/NA	Water	9012B	
460-163473-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	

Analysis Batch: 550966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163634-1	RW8(163-173)-082918	Total/NA	Water	9012B	550885
460-163634-2	RW8(204-214)-082918	Total/NA	Water	9012B	550885
460-163634-3	RW9A(85-95)-082918	Total/NA	Water	9012B	550885
460-163634-4	RW9(206-216)-082918	Total/NA	Water	9012B	550885
MB 460-550885/1-A	Method Blank	Total/NA	Water	9012B	550885
LCS 460-550885/2-A	Lab Control Sample	Total/NA	Water	9012B	550885
460-163473-A-4-B MS	Matrix Spike	Total/NA	Water	9012B	550885
460-163473-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	550885

Client Sample ID: RW8(163-173)-082918

Lab Sample ID: 460-163634-1

Date Collected: 08/29/18 11:00

Matrix: Water

Date Received: 08/30/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549256	09/02/18 05:51	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	550312	09/07/18 21:50	DAS	TAL EDI
Total/NA	Prep	3510C			549018	08/31/18 17:11	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549280	09/02/18 06:43	SK	TAL EDI
Total/NA	Prep	3510C			549018	08/31/18 17:11	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549294	09/02/18 03:44	SK	TAL EDI
Total/NA	Prep	3510C			549186	09/01/18 09:58	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549259	09/01/18 21:24	SK	TAL EDI
Total/NA	Prep	3510C			549539	09/04/18 10:18	ANM	TAL EDI
Total/NA	Analysis	8082A		1	549775	09/05/18 12:58	JHP	TAL EDI
Total/NA	Analysis	9056A	DL	10	549198	09/02/18 01:24	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			550920	09/10/18 11:13	MDC	TAL EDI
Dissolved	Prep	3010A			551569	09/12/18 11:55	MDC	TAL EDI
Dissolved	Analysis	6020B		2	551612	09/12/18 15:27	MDC	TAL EDI
Total/NA	Prep	3010A			550741	09/09/18 05:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	550921	09/10/18 01:52	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			550003	09/06/18 05:11	TJS	TAL EDI
Dissolved	Prep	7470A			550012	09/06/18 06:02	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550101	09/06/18 09:58	TJS	TAL EDI
Total/NA	Prep	7470A			550004	09/06/18 05:32	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550101	09/06/18 08:53	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:05	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 11:36	PHM	TAL EDI

Client Sample ID: RW8(204-214)-082918

Lab Sample ID: 460-163634-2

Date Collected: 08/29/18 11:30

Matrix: Water

Date Received: 08/30/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549424	09/03/18 06:40	EMM	TAL EDI
Total/NA	Analysis	8260C SIM		1	550312	09/07/18 22:15	DAS	TAL EDI
Total/NA	Prep	3510C			549018	08/31/18 17:11	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549280	09/02/18 07:04	SK	TAL EDI
Total/NA	Prep	3510C			549018	08/31/18 17:11	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549294	09/02/18 04:05	SK	TAL EDI
Total/NA	Prep	3510C			549186	09/01/18 09:58	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549259	09/01/18 21:42	SK	TAL EDI
Total/NA	Prep	3510C			549539	09/04/18 10:18	ANM	TAL EDI
Total/NA	Analysis	8082A		1	549775	09/05/18 16:57	JHP	TAL EDI
Total/NA	Analysis	9056A	DL	20	549198	09/02/18 02:18	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			550920	09/10/18 11:13	MDC	TAL EDI
Dissolved	Prep	3010A			551569	09/12/18 11:55	MDC	TAL EDI

Client Sample ID: RW8(204-214)-082918

Date Collected: 08/29/18 11:30
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020B		2	551612	09/12/18 15:30	MDC	TAL EDI
Total/NA	Prep	3010A			550741	09/09/18 05:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	550921	09/10/18 01:55	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			550003	09/06/18 05:11	TJS	TAL EDI
Dissolved	Prep	7470A			550012	09/06/18 06:02	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550101	09/06/18 10:00	TJS	TAL EDI
Total/NA	Prep	7470A			550004	09/06/18 05:32	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550101	09/06/18 09:22	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:06	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 11:45	PHM	TAL EDI

Client Sample ID: RW9A(85-95)-082918

Date Collected: 08/29/18 14:20
Date Received: 08/30/18 15:40

Lab Sample ID: 460-163634-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549424	09/03/18 07:03	EMM	TAL EDI
Total/NA	Analysis	8260C SIM		1	550312	09/07/18 22:40	DAS	TAL EDI
Total/NA	Prep	3510C			549018	08/31/18 17:11	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549280	09/02/18 07:25	SK	TAL EDI
Total/NA	Prep	3510C			549018	08/31/18 17:11	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549294	09/02/18 04:26	SK	TAL EDI
Total/NA	Prep	3510C			549186	09/01/18 09:58	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549259	09/01/18 22:00	SK	TAL EDI
Total/NA	Prep	3510C			549539	09/04/18 10:18	ANM	TAL EDI
Total/NA	Analysis	8082A		1	549775	09/05/18 13:33	JHP	TAL EDI
Total/NA	Analysis	9056A		1	549067	08/31/18 21:57	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			550920	09/10/18 11:13	MDC	TAL EDI
Dissolved	Prep	3010A			551569	09/12/18 11:55	MDC	TAL EDI
Dissolved	Analysis	6020B		2	551612	09/12/18 15:33	MDC	TAL EDI
Total/NA	Prep	3010A			550741	09/09/18 05:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	550921	09/10/18 01:57	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			550003	09/06/18 05:11	TJS	TAL EDI
Dissolved	Prep	7470A			550012	09/06/18 06:02	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550101	09/06/18 10:01	TJS	TAL EDI
Total/NA	Prep	7470A			550004	09/06/18 05:32	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550101	09/06/18 09:24	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:07	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 11:53	PHM	TAL EDI

Client Sample ID: RW9(206-216)-082918

Lab Sample ID: 460-163634-4

Date Collected: 08/29/18 15:30

Matrix: Water

Date Received: 08/30/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549424	09/03/18 07:25	EMM	TAL EDI
Total/NA	Analysis	8260C SIM		1	550312	09/07/18 23:05	DAS	TAL EDI
Total/NA	Prep	3510C			549018	08/31/18 17:11	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549280	09/02/18 07:46	SK	TAL EDI
Total/NA	Prep	3510C			549018	08/31/18 17:11	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549294	09/02/18 04:47	SK	TAL EDI
Total/NA	Prep	3510C			549186	09/01/18 09:58	KMH	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549259	09/01/18 22:18	SK	TAL EDI
Total/NA	Prep	3510C			549539	09/04/18 10:18	ANM	TAL EDI
Total/NA	Analysis	8082A		1	549775	09/05/18 13:50	JHP	TAL EDI
Total/NA	Analysis	9056A	DL	5	549198	09/02/18 03:12	YXZ	TAL EDI
Total/NA	Analysis	9056A	DL2	40	549198	09/02/18 04:04	YXZ	TAL EDI
Dissolved	Filtration	FILTRATION			550920	09/10/18 11:13	MDC	TAL EDI
Dissolved	Prep	3010A			551569	09/12/18 11:55	MDC	TAL EDI
Dissolved	Analysis	6020B		2	551612	09/12/18 15:35	MDC	TAL EDI
Total/NA	Prep	3010A			550741	09/09/18 05:50	GAE	TAL EDI
Total/NA	Analysis	6020B		2	550921	09/10/18 02:00	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			550003	09/06/18 05:11	TJS	TAL EDI
Dissolved	Prep	7470A			550012	09/06/18 06:02	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550101	09/06/18 10:03	TJS	TAL EDI
Total/NA	Prep	7470A			550004	09/06/18 05:32	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550101	09/06/18 09:25	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:08	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 12:00	PHM	TAL EDI

Client Sample ID: TB-05-083018

Lab Sample ID: 460-163634-5

Date Collected: 08/30/18 00:00

Matrix: Water

Date Received: 08/30/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549424	09/03/18 02:11	EMM	TAL EDI
Total/NA	Analysis	8260C SIM		1	550312	09/07/18 23:30	DAS	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	12028	06-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	Ethylene Dibromide
8270D SIM	3510C	Water	Bis(2-chloroethyl)ether
9056A		Water	Chloride
9056A		Water	Sulfate

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL EDI
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
9056A	Anions, Ion Chromatography	SW846	TAL EDI
6020B	Metals (ICP/MS)	SW846	TAL EDI
7470A	Mercury (CVAA)	SW846	TAL EDI
9012B	Cyanide, Total andor Amenable	SW846	TAL EDI
SM 2320B	Alkalinity	SM	TAL EDI
3010A	Preparation, Total Metals	SW846	TAL EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI
7470A	Preparation, Mercury	SW846	TAL EDI
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL EDI
FILTRATION	Sample Filtration	None	TAL EDI

Protocol References:

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163634-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-163634-1	RW8(163-173)-082918	Water	08/29/18 11:00	08/30/18 15:40
460-163634-2	RW8(204-214)-082918	Water	08/29/18 11:30	08/30/18 15:40
460-163634-3	RW9A(85-95)-082918	Water	08/29/18 14:20	08/30/18 15:40
460-163634-4	RW9(206-216)-082918	Water	08/29/18 15:30	08/30/18 15:40
460-163634-5	TB-05-083018	Water	08/30/18 00:00	08/30/18 15:40

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

9/14/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page ___ of ___

Name (for report and invoice): Tim Roeper	Samplers Name (Printed): Dan Wheeler	Site/Project Identification: Ringwood
Company: Cornerstone Environmental Group	P. O. #: 180361-006	State (Location of site): NJ: ☒ NY: ☐ Other:
		Regulatory Program: DKQP: ☐
Address: 100 Crystal Run Rd, Suite 101	Analysis Turnaround Time: Standard ☒	LAB USE ONLY Project No:
City: Middletown State: NY 10941	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	Job No: 163634
Phone: 845-695-0200 Fax:		Sample Numbers

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs +15 TICs w/SIM	TCL BNA/SVOCs w/SIM	1,4 Dioxane by Isotope Dilution	PCB's	Chloride	Sulfate	Alkalinity	TAL Metals	Dissolved TAL metals	Total Cyanide	Sample Numbers
RW8 (163-173)-082918	8.29.18	11:00	GW	15	X	X	X	X	X	X	X	X	X	X	1
RW8 (204-214)-082918	8.29.18	11:30	GW	15	X	X	X	X	X	X	X	X	X	X	2
RW9A (85-95)-082918	8.29.18	14:20	GW	15	X	X	X	X	X	X	X	X	X	X	3
RW9 (206-216)-082918	8.29.18	15:30	GW	12	X	X	X	X	X	X	X	X	X	X	4
TB-05-083018	8.30.18	—	BW	3	X										5

460-163634 Chain of Custody

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other ____, 7 = Other ____														
Soil:														
Water:	2	1	1	1	1	1	1	4	1	5				

Special Instructions ☆ Low yeild for RW-9(206-216)-only 12 bottles Water Metals Filtered (Yes/No)? ____

Relinquished by	Company	Date / Time	Received by	Company
1) Emily Bauer	Cornerstone	8/30/18 11:10	1) Tim Yap	TA Edison
2) Tim Yap	TA Edison	8/30/18 15:40	2)	AGI
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

IR # 9 2.6°C 2.8°C VOCs

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 163634

Number of Coolers: 1 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.6 °C	2.6 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.8 °C	2.8 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1				<2								7:2			
2				<2								7:2			
3				<2								7:2			
4				<2								7:2			

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

* *Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: TY **Date:** 8/30/18

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 460-163634-1

Login Number: 163634
List Number: 1
Creator: Meyers, Gary

List Source: TestAmerica Edison

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

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-163741-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Dr. Tim Roeper

Authorized for release by:
9/18/2018 10:58:13 AM

Marie Meidhof, Senior Project Manager
(732)549-3900
marie.meidhof@testamericainc.com

LINKS

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

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F2	MS/MSD RPD exceeds control limits
*	ISTD response or retention time outside acceptable limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

HPLC/IC

Qualifier	Qualifier Description
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-163741-1

Laboratory: TestAmerica Edison

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 460-163741-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 8/31/2018 7:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 7 coolers at receipt time were 2.0º C, 2.1º C, 2.1º C, 2.3º C, 2.4º C, 2.4º C and 3.0º C.

Receipt Exceptions

One voa vial for the following sample was broken on receipt: RW-14S(135-155)-083118 (460-163741-3); there is sufficient volume to run the requested VOC analyses.

Only 3 bottles per sample were provided for the following samples for the SVOC, SVOC SIM, 1,4 Dioxane, and PCB analysis: RW-11D(262-267)-083118 (460-163741-2), RW-13(100-120)-083018 (460-163741-10) and RW-3DS(155-160)-083018 (460-163741-11). There is sufficient volume to extract the samples once for each analysis.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples RW-11S(236-241)-083118 (460-163741-1), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-15S(110-120)-083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), FB-04-083118 (460-163741-7), RW-14D(175-185)-083118 (460-163741-8), RW-13(150-170)-083018 (460-163741-9), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018 (460-163741-13), RW-4(333-343)-083018 (460-163741-14), RW-4(393-403)-083018 (460-163741-15), RW-4A(62-72)-083018 (460-163741-16), TB-06-083118 (460-163741-17) and RW-4A-(113-123)-083018 (460-163741-18) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C DKQP. The samples were analyzed on 09/04/2018 and 09/05/2018.

The continuing calibration verification (CCV) analyzed in batch 460-549619 was outside the method criteria for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane and Dichlorodifluoromethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

Job ID: 460-163741-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) DKQP

Samples RW-11S(236-241)-083118 (460-163741-1), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-15S(110-120)-083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), FB-04-083118 (460-163741-7), RW-14D(175-185)-083118 (460-163741-8), RW-13(150-170)-083018 (460-163741-9), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018 (460-163741-13), RW-4(333-343)-083018 (460-163741-14), RW-4(393-403)-083018 (460-163741-15), RW-4A(62-72)-083018 (460-163741-16) and RW-4A-(113-123)-083018 (460-163741-18) were analyzed for Semivolatile organic compounds (GC/MS) DKQP in accordance with EPA SW-846 Method 8270D DKQP. The samples were prepared on 09/02/2018 and 09/05/2018 and analyzed on 09/02/2018, 09/04/2018 and 09/06/2018.

The CCV associated with batch 460-549364 recovered above the upper control limit for Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCVIS 460-549364/2).

The CCV analyzed in batch 460-549364 was outside the method criteria for the following analyte: 2,2'-oxybis[1-chloropropane]. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The CCV associated with batch 460-549470 recovered above the upper control limit for 2,3,4,6-Tetrachlorophenol, 2,4-Dinitrophenol, 2-Nitrophenol, 4,6-Dinitro-2-methylphenol, 4-Nitrophenol and Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The CCV associated with batch 460-549718 recovered above the upper control limit for 2,3,4,6-Tetrachlorophenol, 2,4-Dinitrophenol, 2-Nitrophenol, 4,6-Dinitro-2-methylphenol, 4-Nitrophenol, Bis(2-ethylhexyl) phthalate, Butyl benzyl phthalate and Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The CCV analyzed in batch 460-549905 was outside the method criteria for the following analyte: 2,2'-oxybis[1-chloropropane]. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The laboratory control sample (LCS) for preparation batch 460-549338 and analytical batch 460-549364 recovered outside control limits for the following analytes: Di-n-octyl phthalate. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits due to poor performance. The LCS associated with batch 460-549338 had Atrazine and Caprolactam outside control limits (low recovery); re-extraction/re-analysis was not performed and results have been reported and qualified (LCS 460-549338/3-A).

The LCS for preparation batch 460-549397 and analytical batch 460-549470 recovered outside control limits for the following analyte: Atrazine. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

The LCS and lab control sample duplicate (LCSD) for preparation batch 460-549397 and analytical batch 460-549718 recovered outside control limits for the following analyte: 2,4-Dinitrophenol. This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

Job ID: 460-163741-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

The LCS and LCSD associated with preparation batch 460-549397 and analytical batch 460-549718 was outside DKQP recovery criteria (low recovery) but within laboratory generated limits for the following analyte: Hexachlorobutadiene. The data has been reported.

The LCS and LCSD associated with preparation batch 460-549791 and analytical batch 460-549905 was outside DKQP recovery criteria (low recovery) but within laboratory generated limits for the following analytes: 2,2'-oxybis[1-chloropropane], 2-Methylphenol and 3,3'-Dichlorobenzidine. The data has been reported.

Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits. 2,4,6-Tribromophenol (Surr) failed the surrogate recovery criteria high for RW-11S(236-241)-083118 (460-163741-1), RW-13(100-120) -083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155) -083118 (460-163741-3), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), RW-14D(175-185)-083118 (460-163741-8), MB 460-549338/1-A, LCS 460-549338/2-A, LCS 460-549338/3-A, LCSD 460-549397/5-A, RW-14S(135-155)-083118MS (460-163741-3MS), and RW-14S(135-155)-083118MSD (460-163741-3MSD).

2-Methylphenol failed the recovery criteria low for the matrix spike (MS) and matrix spike duplicate (MSD) of sample RW-14S(135-155) -083118 (460-163741-3) in batch 460-549364. Atrazine and Di-n-octyl phthalate failed the recovery criteria high.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM)

Samples RW-11S(236-241)-083118 (460-163741-1), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-15S(110-120)-083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), FB-04-083118 (460-163741-7), RW-14D(175-185)-083118 (460-163741-8), RW-13(150-170)-083018 (460-163741-9), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018 (460-163741-13), RW-4(333-343)-083018 (460-163741-14), RW-4(393-403)-083018 (460-163741-15), RW-4A(62-72)-083018 (460-163741-16) and RW-4A-(113-123)-083018 (460-163741-18) were analyzed for semivolatile organic compounds - Selected Ion Mode (SIM) in accordance with EPA Method 8270C SIM DKQP. The samples were prepared on 09/02/2018 and analyzed on 09/02/2018 and 09/05/2018.

The CCV associated with batch 460-549391 recovered above the upper control limit for Pentachlorophenol, Hexachlorobenzene and Indeno[1,2,3-cd]pyrene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The CCV associated with batch 460-549462 recovered above the upper control limit for Hexachlorobenzene and Pentachlorophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The CCV analyzed in 460-549753 was outside the method criteria for the following analyte: Hexachlorobenzene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The LCS and LCSD for preparation batch 460-549338 and analytical batch 460-549391 recovered outside control limits for the following analytes: Dibenz(a,h)anthracene, Hexachlorobenzene, Indeno[1,2,3-cd]pyrene and Pentachlorophenol. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

The LCS for preparation batch 460-549397 and analytical batch 460-549462 recovered outside control limits for the following analyte: Bis(2-chloroethyl)ether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Job ID: 460-163741-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

The LCSD for preparation batch 460-549397 and analytical batch 460-549462 recovered outside control limits for the following analyte: Hexachlorobenzene. The LCS recovery was within limits; therefore, the data have been reported. Hexachlorobenzene failed the recovery criteria high for LCSD 460-549397/7-A.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

1,4 DIOXANE BY 8270D SIM, ISOTOPE DILUTION

Samples RW-11S(236-241)-083118 (460-163741-1), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-15S(110-120)-083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), FB-04-083118 (460-163741-7), RW-14D(175-185)-083118 (460-163741-8), RW-13(150-170)-083018 (460-163741-9), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018 (460-163741-13), RW-4(333-343)-083018 (460-163741-14), RW-4(393-403)-083018 (460-163741-15), RW-4A(62-72)-083018 (460-163741-16) and RW-4A-(113-123)-083018 (460-163741-18) were analyzed for 1,4 Dioxane by 8270D SIM, Isotope Dilution in accordance with EPA SW-846 Method 8270D SIM. The samples were prepared on 09/04/2018 and analyzed on 09/05/2018.

No difficulties were encountered during the 1,4 Dioxane analysis.

All quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS) - SELECTED ION MODE (SIM) DKQP

Samples RW-11S(236-241)-083118 (460-163741-1), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-15S(110-120)-083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), FB-04-083118 (460-163741-7), RW-14D(175-185)-083118 (460-163741-8), RW-13(150-170)-083018 (460-163741-9), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018 (460-163741-13), RW-4(333-343)-083018 (460-163741-14), RW-4(393-403)-083018 (460-163741-15), RW-4A(62-72)-083018 (460-163741-16), TB-06-083118 (460-163741-17) and RW-4A-(113-123)-083018 (460-163741-18) were analyzed for volatile organic compounds (GC-MS) - Selected Ion Mode (SIM) DKQP in accordance with EPA SW-846 Method 8260C SIM DKQP. The samples were analyzed on 09/11/2018 and 09/12/2018.

The CCV analyzed in batch 460-551171 was outside the method criteria for the following analyte: 1,2-Dibromo-3-Chloropropane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The CCV analyzed in batch 460-551666 was outside the method criteria for 1,2-Dibromo-3-Chloropropane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Refer to the QC report for details.

No other difficulties were encountered during the VOA SIM DKQP analysis.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS) DKQP

Samples RW-11S(236-241)-083118 (460-163741-1), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-15S(110-120)-083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), FB-04-083118 (460-163741-7), RW-14D(175-185)-083118 (460-163741-8), RW-13(150-170)-083018 (460-163741-9), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018 (460-163741-13), RW-4(333-343)-083018 (460-163741-14), RW-4(393-403)-083018 (460-163741-15), RW-4A(62-72)-083018 (460-163741-16) and RW-4A-(113-123)-083018 (460-163741-18) were analyzed for polychlorinated biphenyls

Job ID: 460-163741-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

(PCBs) DKQP in accordance with EPA SW-846 Method 8082A DKQP. The samples were prepared on 09/04/2018 and analyzed on 09/07/2018.

Internal standard (ISTD) response for the following sample exceeded the control limit on the primary Column Stx-CLP: RW-14S(135-155) -083118 (460-163741-3). As such, the sample results associated with this ISTD were reported from the other column, which met ISTD acceptance criteria.

The following samples, MS and MSD were required a copper clean-up to reduce matrix interferences caused by sulfur: RW-14S(135-155) -083118 (460-163741-3), RW-14S(135-155)-083118 (460-163741-3[MS]), RW-14S(135-155)-083118 (460-163741-3[MSD]) and RW-14D(175-185)-083118 (460-163741-8).

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICP/MS)

Samples RW-11S(236-241)-083118 (460-163741-1), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-15S(110-120)-083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), FB-04-083118 (460-163741-7), RW-14D(175-185)-083118 (460-163741-8), RW-13(150-170)-083018 (460-163741-9), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018 (460-163741-13), RW-4(333-343)-083018 (460-163741-14), RW-4(393-403)-083018 (460-163741-15), RW-4A(62-72)-083018 (460-163741-16) and RW-4A-(113-123)-083018 (460-163741-18) were analyzed for Dissolved Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared and analyzed on 09/14/2018.

Calcium failed the recovery criteria low for the MS of sample RW-14S(135-155)-083118MS (460-163741-3) in batch 460-552232.

Refer to the QC report for details.

Samples RW-11S(236-241)-083118 (460-163741-1)[2X], RW-11D(262-267)-083118 (460-163741-2)[2X], RW-14S(135-155)-083118 (460-163741-3)[2X], RW-15S(110-120)-083118 (460-163741-4)[2X], RW-15D(127-137)-083118 (460-163741-5)[2X], DUP-04-083118 (460-163741-6)[2X], FB-04-083118 (460-163741-7)[2X], RW-14D(175-185)-083118 (460-163741-8)[2X], RW-13(150-170)-083018 (460-163741-9)[2X], RW-13(100-120)-083018 (460-163741-10)[2X], RW-3DS(155-160)-083018 (460-163741-11)[2X], RW-3DD(175-180) -083018 (460-163741-12)[2X], RW-3(77-87)-083018 (460-163741-13)[2X], RW-4(333-343)-083018 (460-163741-14)[2X], RW-4(393-403) -083018 (460-163741-15)[2X], RW-4A(62-72)-083018 (460-163741-16)[2X] and RW-4A-(113-123)-083018 (460-163741-18)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Dissolved Metals analysis.

All other quality control parameters were within the acceptance limits.

METALS (ICP/MS)

Samples RW-11S(236-241)-083118 (460-163741-1), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-15S(110-120)-083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), FB-04-083118 (460-163741-7), RW-14D(175-185)-083118 (460-163741-8), RW-13(150-170)-083018 (460-163741-9), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018 (460-163741-13), RW-4(333-343)-083018 (460-163741-14), RW-4(393-403)-083018 (460-163741-15), RW-4A(62-72)-083018 (460-163741-16) and RW-4A-(113-123)-083018 (460-163741-18) were analyzed for Metals (ICP/MS) in accordance with 6020B DKQP. The samples were prepared on 09/08/2018 and analyzed on 09/12/2018, 09/13/2018 and 09/14/2018.

Lead was detected in method blank MB 460-550528/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Calcium, Selenium and Sodium failed the recovery criteria low for the MS of sample RW-14S(135-155)-083118MS (460-163741-3) in batch 460-551612.

Job ID: 460-163741-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Antimony and Arsenic exceeded the RPD limit for the duplicate of sample RW-14S(135-155)-083118DU (460-163741-3).

Refer to the QC report for details.

No other difficulties were encountered during the Metals DKQP analysis.

All other quality control parameters were within the acceptance limits.

MERCURY DKQP

Samples RW-11S(236-241)-083118 (460-163741-1), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-15S(110-120)-083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), FB-04-083118 (460-163741-7), RW-14D(175-185)-083118 (460-163741-8), RW-13(150-170)-083018 (460-163741-9), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018 (460-163741-13), RW-4(333-343)-083018 (460-163741-14), RW-4(393-403)-083018 (460-163741-15), RW-4A(62-72)-083018 (460-163741-16) and RW-4A-(113-123)-083018 (460-163741-18) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 09/07/2018.

No difficulties were encountered during the dissolved Hg analysis.

All quality control parameters were within the acceptance limits.

MERCURY DKQP

Samples RW-11S(236-241)-083118 (460-163741-1), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-15S(110-120)-083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), FB-04-083118 (460-163741-7), RW-14D(175-185)-083118 (460-163741-8), RW-13(150-170)-083018 (460-163741-9), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018 (460-163741-13), RW-4(333-343)-083018 (460-163741-14), RW-4(393-403)-083018 (460-163741-15), RW-4A(62-72)-083018 (460-163741-16) and RW-4A-(113-123)-083018 (460-163741-18) were analyzed for mercury DKQP in accordance with EPA SW-846 Method 7470A DKQP. The samples were prepared and analyzed on 09/07/2018.

No difficulties were encountered during the Hg analysis.

All quality control parameters were within the acceptance limits.

ANIONS

Samples RW-11S(236-241)-083118 (460-163741-1), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-15S(110-120)-083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), FB-04-083118 (460-163741-7), RW-14D(175-185)-083118 (460-163741-8), RW-13(150-170)-083018 (460-163741-9), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018 (460-163741-13), RW-4(333-343)-083018 (460-163741-14), RW-4(393-403)-083018 (460-163741-15), RW-4A(62-72)-083018 (460-163741-16) and RW-4A-(113-123)-083018 (460-163741-18) were analyzed for anions in accordance with EPA SW-846 Method 9056. The samples were analyzed on 09/04/2018 and 09/05/2018.

Chloride failed the recovery criteria low for the MS and MSD of sample RW-13(100-120)-083018 (460-163741-10) in batch 460-549836. Sulfate failed the recovery criteria high.

Chloride failed the recovery criteria low for the MS and MSD of sample RW-14S(135-155)-083118 (460-163741-3) in batch 460-549836. Sulfate failed the recovery criteria high.

Refer to the QC report for details.

The following samples were diluted to bring the concentration of Chloride within the calibration range: RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-14S(135-155)-083118 (460-163741-3[MS]), RW-14S(135-155)-083118 (460-163741-3[MSD]), RW-13(150-170)-083018 (460-163741-9), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018

Job ID: 460-163741-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

(460-163741-13) and (460-163741-E-3 DU). Elevated reporting limits (RLs) are provided.

The following samples were diluted to bring the concentration of Chloride and Sulfate within the calibration range: RW-15S(110-120) -083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), RW-14D(175-185)-083118 (460-163741-8), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), (460-163741-E-10 DU), (460-163741-E-10 MS) and (460-163741-E-10 MSD). Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the anions analysis.

All other quality control parameters were within the acceptance limits.

ALKALINITY

Samples RW-11S(236-241)-083118 (460-163741-1), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-15S(110-120)-083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), FB-04-083118 (460-163741-7), RW-14D(175-185)-083118 (460-163741-8), RW-13(150-170)-083018 (460-163741-9), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018 (460-163741-13), RW-4(333-343)-083018 (460-163741-14), RW-4(393-403)-083018 (460-163741-15), RW-4A(62-72)-083018 (460-163741-16) and RW-4A-(113-123)-083018 (460-163741-18) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 09/04/2018.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

TOTAL CYANIDE

Samples RW-11S(236-241)-083118 (460-163741-1), RW-11D(262-267)-083118 (460-163741-2), RW-14S(135-155)-083118 (460-163741-3), RW-15S(110-120)-083118 (460-163741-4), RW-15D(127-137)-083118 (460-163741-5), DUP-04-083118 (460-163741-6), FB-04-083118 (460-163741-7), RW-14D(175-185)-083118 (460-163741-8), RW-13(150-170)-083018 (460-163741-9), RW-13(100-120)-083018 (460-163741-10), RW-3DS(155-160)-083018 (460-163741-11), RW-3DD(175-180)-083018 (460-163741-12), RW-3(77-87)-083018 (460-163741-13), RW-4(333-343)-083018 (460-163741-14), RW-4(393-403)-083018 (460-163741-15), RW-4A(62-72)-083018 (460-163741-16) and RW-4A-(113-123)-083018 (460-163741-18) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012B (DKQP). The samples were prepared and analyzed on 09/10/2018.

No difficulties were encountered during the cyanide analysis.

All quality control parameters were within the acceptance limits.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-11S(236-241)-083118 — Lab Sample ID: 460-163741-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.90		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride	0.95		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	7.53		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	17.9		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	8.4		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	504		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	11.2		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.44	J	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	2.1		2.0	0.62	ug/L	2		6020B	Total/NA
Zinc	6.9	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	84.0		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	3430		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2230		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1600		200	64.9	ug/L	2		6020B	Total/NA
Calcium	16700		200	67.6	ug/L	2		6020B	Total/NA
Iron	709		120	45.7	ug/L	2		6020B	Total/NA
Barium	17.2		4.0	1.1	ug/L	2		6020B	Dissolved
Cobalt	1.3	J	4.0	1.3	ug/L	2		6020B	Dissolved
Manganese	525		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	3380		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2240		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1480		200	64.9	ug/L	2		6020B	Dissolved
Calcium	16400		200	67.6	ug/L	2		6020B	Dissolved
Iron	97.9	J	120	45.7	ug/L	2		6020B	Dissolved
Mercury	2.1		0.20	0.12	ug/L	1		7470A	Total/NA
Mercury	1.1		0.20	0.12	ug/L	1		7470A	Dissolved
Bicarbonate Alkalinity as CaCO3	52.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	52.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-11D(262-267)-083118 — Lab Sample ID: 460-163741-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	3.5	J	5.0	1.9	ug/L	1		8260C	Total/NA
Acetone	39		5.0	5.0	ug/L	1		8260C	Total/NA
Benzene	11		1.0	0.43	ug/L	1		8260C	Total/NA
Carbon disulfide	10		1.0	0.16	ug/L	1		8260C	Total/NA
Chlorobenzene	4.8		1.0	0.38	ug/L	1		8260C	Total/NA
Chloroethane	5.5		1.0	0.32	ug/L	1		8260C	Total/NA
Isopropylbenzene	0.95	J	1.0	0.34	ug/L	1		8260C	Total/NA
Methylene Chloride	0.40	J	1.0	0.32	ug/L	1		8260C	Total/NA
1,4-Dioxane	41		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Phenol	2.5	J	10	0.29	ug/L	1		8270D	Total/NA
Sulfate	3.10		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	33.1	D	1.56	1.01	mg/L	13		9056A	Total/NA
Arsenic	0.93	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	80.4		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	3.9	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	3.2	J	4.0	1.9	ug/L	2		6020B	Total/NA
Nickel	9.5		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.59	J	1.2	0.37	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW-11D(262-267)-083118 (Continued) — Lab Sample ID: 460-163741-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.4		2.0	0.62	ug/L	2		6020B	Total/NA
Selenium	1.8	J	10.0	0.69	ug/L	2		6020B	Total/NA
Vanadium	1.3	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	9.3	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	9820		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	147000		200	75.7	ug/L	2		6020B	Total/NA
Potassium	38100		200	64.9	ug/L	2		6020B	Total/NA
Calcium	127000		200	67.6	ug/L	2		6020B	Total/NA
Iron	85.6	J	120	45.7	ug/L	2		6020B	Total/NA
Barium	49.8		4.0	1.1	ug/L	2		6020B	Dissolved
Nickel	9.2		4.0	1.3	ug/L	2		6020B	Dissolved
Selenium	17.8		10.0	0.69	ug/L	2		6020B	Dissolved
Aluminum	10200		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	175000		200	75.7	ug/L	2		6020B	Dissolved
Potassium	34100		200	64.9	ug/L	2		6020B	Dissolved
Calcium	86600		200	67.6	ug/L	2		6020B	Dissolved
Alkalinity	573		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-14S(135-155)-083118 — Lab Sample ID: 460-163741-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.54	J	1.0	0.16	ug/L	1		8260C	Total/NA
Methylene Chloride	0.32	J	1.0	0.32	ug/L	1		8260C	Total/NA
Sulfate	1.92		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	36.7	D	1.80	1.17	mg/L	15		9056A	Total/NA
Arsenic	1.4	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	9.5		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	60.2		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	0.65	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	1.8	J	4.0	1.2	ug/L	2		6020B	Total/NA
Sodium	43600		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	11900		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2960		200	64.9	ug/L	2		6020B	Total/NA
Calcium	44200		200	67.6	ug/L	2		6020B	Total/NA
Iron	58.8	J	120	45.7	ug/L	2		6020B	Total/NA
Arsenic	2.1		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	9.6		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	46.4		8.0	2.7	ug/L	2		6020B	Dissolved
Vanadium	1.4	J	4.0	1.2	ug/L	2		6020B	Dissolved
Sodium	46800		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	12300		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2830		200	64.9	ug/L	2		6020B	Dissolved
Calcium	43500		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	190		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	190		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-15S(110-120)-083118 — Lab Sample ID: 460-163741-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12		5.0	5.0	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW-15S(110-120)-083118 (Continued) — Lab Sample ID: 460-163741-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	4.3		1.0	0.16	ug/L	1		8260C	Total/NA
Chloromethane	0.42	J	1.0	0.14	ug/L	1		8260C	Total/NA
Methylene Chloride	0.44	J	1.0	0.32	ug/L	1		8260C	Total/NA
Toluene	1.0		1.0	0.38	ug/L	1		8260C	Total/NA
Chloride - DL	10.8	D	0.96	0.62	mg/L	8		9056A	Total/NA
Sulfate - DL	102	D	4.80	2.66	mg/L	8		9056A	Total/NA
Arsenic	23.5		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	5.2		4.0	1.1	ug/L	2		6020B	Total/NA
Nickel	4.9		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.51	J	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	2.4		2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	10.2		4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	87.8		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	55700		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	1340		200	65.7	ug/L	2		6020B	Total/NA
Potassium	4330		200	64.9	ug/L	2		6020B	Total/NA
Calcium	39800		200	67.6	ug/L	2		6020B	Total/NA
Iron	71.6	J	120	45.7	ug/L	2		6020B	Total/NA
Arsenic	31.0		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	5.2		4.0	1.1	ug/L	2		6020B	Dissolved
Nickel	1.5	J	4.0	1.3	ug/L	2		6020B	Dissolved
Selenium	1.4	J	10.0	0.69	ug/L	2		6020B	Dissolved
Vanadium	11.0		4.0	1.2	ug/L	2		6020B	Dissolved
Aluminum	46.8		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	63300		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	1140		200	65.7	ug/L	2		6020B	Dissolved
Potassium	4220		200	64.9	ug/L	2		6020B	Dissolved
Calcium	40300		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	9.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	98.0		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-15D(127-137)-083118 — Lab Sample ID: 460-163741-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	41		5.0	5.0	ug/L	1		8260C	Total/NA
Carbon disulfide	11		1.0	0.16	ug/L	1		8260C	Total/NA
Chloromethane	0.48	J	1.0	0.14	ug/L	1		8260C	Total/NA
Toluene	1.5		1.0	0.38	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.49		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Phenol	12		10	0.29	ug/L	1		8270D	Total/NA
Acetophenone	1.4	J	10	0.79	ug/L	1		8270D	Total/NA
Chloride - DL	26.3	D	2.04	1.33	mg/L	17		9056A	Total/NA
Sulfate - DL	232	D	10.2	5.64	mg/L	17		9056A	Total/NA
Arsenic	6.8		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	16.7		4.0	1.1	ug/L	2		6020B	Total/NA
Nickel	8.4		4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	2.1		2.0	0.62	ug/L	2		6020B	Total/NA
Selenium	5.2	J	10.0	0.69	ug/L	2		6020B	Total/NA
Vanadium	36.3		4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	105		40.0	15.0	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW-15D(127-137)-083118 (Continued) — Lab Sample ID: 460-163741-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	148000		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	96.5	J	200	65.7	ug/L	2		6020B	Total/NA
Potassium	22300		200	64.9	ug/L	2		6020B	Total/NA
Calcium	82300		200	67.6	ug/L	2		6020B	Total/NA
Iron	77.3	J	120	45.7	ug/L	2		6020B	Total/NA
Arsenic	8.2		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	16.8		4.0	1.1	ug/L	2		6020B	Dissolved
Nickel	8.0		4.0	1.3	ug/L	2		6020B	Dissolved
Selenium	12.6		10.0	0.69	ug/L	2		6020B	Dissolved
Vanadium	35.6		4.0	1.2	ug/L	2		6020B	Dissolved
Aluminum	87.8		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	148000		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	109	J	200	65.7	ug/L	2		6020B	Dissolved
Potassium	20100		200	64.9	ug/L	2		6020B	Dissolved
Calcium	79500		200	67.6	ug/L	2		6020B	Dissolved
Iron	55.1	J	120	45.7	ug/L	2		6020B	Dissolved
Alkalinity	204		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: DUP-04-083118 — Lab Sample ID: 460-163741-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.0		5.0	5.0	ug/L	1		8260C	Total/NA
Carbon disulfide	2.4		1.0	0.16	ug/L	1		8260C	Total/NA
Methylene Chloride	0.45	J	1.0	0.32	ug/L	1		8260C	Total/NA
Toluene	0.84	J	1.0	0.38	ug/L	1		8260C	Total/NA
Chloride - DL	12.5	D	0.96	0.62	mg/L	8		9056A	Total/NA
Sulfate - DL	111	D	4.80	2.66	mg/L	8		9056A	Total/NA
Arsenic	20.8		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	4.8		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.0	J	4.0	1.9	ug/L	2		6020B	Total/NA
Nickel	2.8	J	4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	2.2		2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	8.0		4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	86.1		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	41400		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	2120		200	65.7	ug/L	2		6020B	Total/NA
Potassium	3810		200	64.9	ug/L	2		6020B	Total/NA
Calcium	38600		200	67.6	ug/L	2		6020B	Total/NA
Arsenic	28.3		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	4.8		4.0	1.1	ug/L	2		6020B	Dissolved
Selenium	1.2	J	10.0	0.69	ug/L	2		6020B	Dissolved
Vanadium	8.4		4.0	1.2	ug/L	2		6020B	Dissolved
Aluminum	59.2		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	49800		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	2050		200	65.7	ug/L	2		6020B	Dissolved
Potassium	3560		200	64.9	ug/L	2		6020B	Dissolved
Calcium	37000		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	18.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	97.2		5.0	5.0	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: FB-04-083118 — Lab Sample ID: 460-163741-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	1.0		1.0	0.16	ug/L	1		8260C	Total/NA
Methylene Chloride	4.9		1.0	0.32	ug/L	1		8260C	Total/NA
Chloride	0.11	J	0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	0.40	J	0.60	0.33	mg/L	1		9056A	Total/NA
Antimony	1.9	J	2.0	0.62	ug/L	2		6020B	Total/NA

Client Sample ID: RW-14D(175-185)-083118 — Lab Sample ID: 460-163741-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.82	J	1.0	0.16	ug/L	1		8260C	Total/NA
Chloroethane	0.60	J	1.0	0.32	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.36		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Chloride - DL	62.7	D	2.88	1.87	mg/L	24		9056A	Total/NA
Sulfate - DL	223	D	14.4	7.97	mg/L	24		9056A	Total/NA
Arsenic	5.2		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	33.4		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	1.3	J	4.0	1.3	ug/L	2		6020B	Total/NA
Copper	2.5	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	556		8.0	2.7	ug/L	2		6020B	Total/NA
Antimony	2.1		2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	2.2	J	4.0	1.2	ug/L	2		6020B	Total/NA
Sodium	202000		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	11200		200	65.7	ug/L	2		6020B	Total/NA
Potassium	5220		200	64.9	ug/L	2		6020B	Total/NA
Calcium	62200		200	67.6	ug/L	2		6020B	Total/NA
Iron	12200		120	45.7	ug/L	2		6020B	Total/NA
Arsenic	1.3	J	2.0	0.77	ug/L	2		6020B	Dissolved
Barium	24.7		4.0	1.1	ug/L	2		6020B	Dissolved
Copper	2.2	J	4.0	1.9	ug/L	2		6020B	Dissolved
Manganese	552		8.0	2.7	ug/L	2		6020B	Dissolved
Sodium	196000		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	14300		200	65.7	ug/L	2		6020B	Dissolved
Potassium	5100		200	64.9	ug/L	2		6020B	Dissolved
Calcium	62800		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	307		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	307		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-13(150-170)-083018 — Lab Sample ID: 460-163741-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.52	J	1.0	0.16	ug/L	1		8260C	Total/NA
Sulfate	12.2		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	5.71	D	0.24	0.16	mg/L	2		9056A	Total/NA
Barium	4.1		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	7.1	J	8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	6.0		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.66	J	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	1.4	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	1.2	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	13.7	J	16.0	5.4	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW-13(150-170)-083018 (Continued) — Lab Sample ID: 460-163741-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	91.8		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	5180		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	6530		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1650		200	64.9	ug/L	2		6020B	Total/NA
Calcium	27000		200	67.6	ug/L	2		6020B	Total/NA
Iron	101	J	120	45.7	ug/L	2		6020B	Total/NA
Barium	4.8		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	10.6		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	6.6		4.0	1.3	ug/L	2		6020B	Dissolved
Zinc	13.0	J	16.0	5.4	ug/L	2		6020B	Dissolved
Sodium	5150		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	7220		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1480		200	64.9	ug/L	2		6020B	Dissolved
Calcium	25100		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	84.2		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	102		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-13(100-120)-083018 — Lab Sample ID: 460-163741-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	14		5.0	5.0	ug/L	1		8260C	Total/NA
Carbon disulfide	1.3		1.0	0.16	ug/L	1		8260C	Total/NA
Toluene	0.41	J	1.0	0.38	ug/L	1		8260C	Total/NA
Phenol	2.8	J	10	0.29	ug/L	1		8270D	Total/NA
Isophorone	0.80	J	10	0.80	ug/L	1		8270D	Total/NA
Chloride - DL	20.0	D	0.96	0.62	mg/L	8		9056A	Total/NA
Sulfate - DL	74.1	D	4.80	2.66	mg/L	8		9056A	Total/NA
Arsenic	2.7		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	9.0		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.9	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	11.6		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	15.0		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	1.1	J	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	1.8	J	2.0	0.62	ug/L	2		6020B	Total/NA
Selenium	4.5	J	10.0	0.69	ug/L	2		6020B	Total/NA
Vanadium	15.7		4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	26.1		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	2500		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	95500		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	154	J	200	65.7	ug/L	2		6020B	Total/NA
Potassium	81500		200	64.9	ug/L	2		6020B	Total/NA
Calcium	16400		200	67.6	ug/L	2		6020B	Total/NA
Iron	3200		120	45.7	ug/L	2		6020B	Total/NA
Arsenic	3.6		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	11.5		4.0	1.1	ug/L	2		6020B	Dissolved
Nickel	3.3	J	4.0	1.3	ug/L	2		6020B	Dissolved
Selenium	6.7	J	10.0	0.69	ug/L	2		6020B	Dissolved
Vanadium	14.5		4.0	1.2	ug/L	2		6020B	Dissolved
Aluminum	2600		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	104000		200	75.7	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW-13(100-120)-083018 (Continued)

Lab Sample ID: 460-163741-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	78400		200	64.9	ug/L	2		6020B	Dissolved
Calcium	15400		200	67.6	ug/L	2		6020B	Dissolved
Iron	61.3	J	120	45.7	ug/L	2		6020B	Dissolved
Alkalinity	250		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-3DS(155-160)-083018

Lab Sample ID: 460-163741-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.7		1.0	0.26	ug/L	1		8260C	Total/NA
Carbon disulfide	17		1.0	0.16	ug/L	1		8260C	Total/NA
Ethylbenzene	0.44	J	1.0	0.30	ug/L	1		8260C	Total/NA
Methylene Chloride	0.33	J	1.0	0.32	ug/L	1		8260C	Total/NA
Toluene	0.46	J	1.0	0.38	ug/L	1		8260C	Total/NA
Xylenes, Total	0.67	J	2.0	0.65	ug/L	1		8260C	Total/NA
1,4-Dioxane	12		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Phenol	4.4	J	10	0.29	ug/L	1		8270D	Total/NA
Chloride - DL	31.8	D	3.12	2.03	mg/L	26		9056A	Total/NA
Sulfate - DL	361	D	15.6	8.63	mg/L	26		9056A	Total/NA
Arsenic	12.4		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	11.3		4.0	1.1	ug/L	2		6020B	Total/NA
Nickel	3.0	J	4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	2.3		2.0	0.62	ug/L	2		6020B	Total/NA
Selenium	2.0	J	10.0	0.69	ug/L	2		6020B	Total/NA
Vanadium	6.4		4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	44.3		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	177000		200	75.7	ug/L	2		6020B	Total/NA
Potassium	32800		200	64.9	ug/L	2		6020B	Total/NA
Calcium	43100		200	67.6	ug/L	2		6020B	Total/NA
Arsenic	15.7		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	11.3		4.0	1.1	ug/L	2		6020B	Dissolved
Nickel	2.1	J	4.0	1.3	ug/L	2		6020B	Dissolved
Selenium	2.9	J	10.0	0.69	ug/L	2		6020B	Dissolved
Vanadium	5.7		4.0	1.2	ug/L	2		6020B	Dissolved
Aluminum	42.0		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	194000		200	75.7	ug/L	2		6020B	Dissolved
Potassium	28400		200	64.9	ug/L	2		6020B	Dissolved
Calcium	40000		200	67.6	ug/L	2		6020B	Dissolved
Alkalinity	98.7		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-3DD(175-180)-083018

Lab Sample ID: 460-163741-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	9.2		1.0	0.16	ug/L	1		8260C	Total/NA
1,4-Dioxane	12		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Sulfate	29.5		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	10.3	D	0.48	0.31	mg/L	4		9056A	Total/NA
Arsenic	18.8		2.0	0.77	ug/L	2		6020B	Total/NA
Barium	6.9		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	4.8	J	8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	4.0		4.0	1.3	ug/L	2		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW-3DD(175-180)-083018 (Continued) — Lab Sample ID: 460-163741-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.2		2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	3.8	J	4.0	1.2	ug/L	2		6020B	Total/NA
Zinc	10.7	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	132		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	34100		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	906		200	65.7	ug/L	2		6020B	Total/NA
Potassium	13400		200	64.9	ug/L	2		6020B	Total/NA
Calcium	20200		200	67.6	ug/L	2		6020B	Total/NA
Iron	161		120	45.7	ug/L	2		6020B	Total/NA
Arsenic	17.1		2.0	0.77	ug/L	2		6020B	Dissolved
Barium	4.1		4.0	1.1	ug/L	2		6020B	Dissolved
Nickel	2.2	J	4.0	1.3	ug/L	2		6020B	Dissolved
Vanadium	2.6	J	4.0	1.2	ug/L	2		6020B	Dissolved
Aluminum	40.2		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	38400		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	1270		200	65.7	ug/L	2		6020B	Dissolved
Potassium	16600		200	64.9	ug/L	2		6020B	Dissolved
Calcium	7930		200	67.6	ug/L	2		6020B	Dissolved
Alkalinity	77.2		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-3(77-87)-083018 — Lab Sample ID: 460-163741-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	1.1		1.0	0.16	ug/L	1		8260C	Total/NA
1,4-Dioxane	14		0.20	0.016	ug/L	1		8270D SIM ID	Total/NA
Sulfate	5.28		0.60	0.33	mg/L	1		9056A	Total/NA
Chloride - DL	7.40	D	0.36	0.23	mg/L	3		9056A	Total/NA
Barium	55.3		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	2.2	J	4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	439		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.4	J	4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	1.7	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	1.5	J	4.0	1.2	ug/L	2		6020B	Total/NA
Sodium	8100		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	19400		200	65.7	ug/L	2		6020B	Total/NA
Potassium	2500		200	64.9	ug/L	2		6020B	Total/NA
Calcium	72300		200	67.6	ug/L	2		6020B	Total/NA
Barium	51.4		4.0	1.1	ug/L	2		6020B	Dissolved
Manganese	428		8.0	2.7	ug/L	2		6020B	Dissolved
Nickel	1.6	J	4.0	1.3	ug/L	2		6020B	Dissolved
Sodium	13200		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	20000		200	65.7	ug/L	2		6020B	Dissolved
Potassium	2190		200	64.9	ug/L	2		6020B	Dissolved
Calcium	68000		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	259		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	259		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-4(333-343)-083018 — Lab Sample ID: 460-163741-14

This Detection Summary does not include radiochemical test results.

Client Sample ID: RW-4(333-343)-083018 (Continued) — Lab Sample ID: 460-163741-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.76	J	1.0	0.16	ug/L	1		8260C	Total/NA
Chloromethane	1.1		1.0	0.14	ug/L	1		8260C	Total/NA
Hexachlorobenzene	0.027	*	0.020	0.013	ug/L	1		8270D SIM	Total/NA
Chloride	3.42		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	29.7		0.60	0.33	mg/L	1		9056A	Total/NA
Arsenic	0.82	J	2.0	0.77	ug/L	2		6020B	Total/NA
Barium	17.3		4.0	1.1	ug/L	2		6020B	Total/NA
Chromium	16.1		4.0	1.3	ug/L	2		6020B	Total/NA
Antimony	1.7	J	2.0	0.62	ug/L	2		6020B	Total/NA
Vanadium	13.4		4.0	1.2	ug/L	2		6020B	Total/NA
Aluminum	790		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	15500		200	75.7	ug/L	2		6020B	Total/NA
Potassium	4400		200	64.9	ug/L	2		6020B	Total/NA
Calcium	52000		200	67.6	ug/L	2		6020B	Total/NA
Barium	15.9		4.0	1.1	ug/L	2		6020B	Dissolved
Chromium	16.0		4.0	1.3	ug/L	2		6020B	Dissolved
Vanadium	13.7		4.0	1.2	ug/L	2		6020B	Dissolved
Aluminum	824		40.0	15.0	ug/L	2		6020B	Dissolved
Sodium	16300		200	75.7	ug/L	2		6020B	Dissolved
Potassium	4160		200	64.9	ug/L	2		6020B	Dissolved
Calcium	34100		200	67.6	ug/L	2		6020B	Dissolved
Alkalinity	122		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: RW-4(393-403)-083018 — Lab Sample ID: 460-163741-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.64	J	1.0	0.16	ug/L	1		8260C	Total/NA
Chloride	1.94		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	18.4		0.60	0.33	mg/L	1		9056A	Total/NA
Silver	18.6		2.0	1.4	ug/L	2		6020B	Total/NA
Barium	18.2		4.0	1.1	ug/L	2		6020B	Total/NA
Manganese	8.9		8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	1.3	J	4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.46	J	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	1.7	J	2.0	0.62	ug/L	2		6020B	Total/NA
Zinc	8.4	J	16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	272		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	8540		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	6340		200	65.7	ug/L	2		6020B	Total/NA
Potassium	7250		200	64.9	ug/L	2		6020B	Total/NA
Calcium	19100		200	67.6	ug/L	2		6020B	Total/NA
Iron	158		120	45.7	ug/L	2		6020B	Total/NA
Barium	14.1		4.0	1.1	ug/L	2		6020B	Dissolved
Sodium	7830		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	6100		200	65.7	ug/L	2		6020B	Dissolved
Potassium	3600		200	64.9	ug/L	2		6020B	Dissolved
Calcium	17100		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	66.2		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	66.2		5.0	5.0	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-4A(62-72)-083018 — Lab Sample ID: 460-163741-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.61	J	1.0	0.16	ug/L	1		8260C	Total/NA
Chloride	2.12		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	9.31		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	4.6		4.0	1.1	ug/L	2		6020B	Total/NA
Copper	4.8		4.0	1.9	ug/L	2		6020B	Total/NA
Manganese	3.4	J	8.0	2.7	ug/L	2		6020B	Total/NA
Nickel	30.0		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	1.6		1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	1.5	J	2.0	0.62	ug/L	2		6020B	Total/NA
Zinc	20.5		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	163		40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	5420		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	3860		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1300		200	64.9	ug/L	2		6020B	Total/NA
Calcium	9180		200	67.6	ug/L	2		6020B	Total/NA
Iron	220		120	45.7	ug/L	2		6020B	Total/NA
Barium	3.9	J	4.0	1.1	ug/L	2		6020B	Dissolved
Nickel	34.7		4.0	1.3	ug/L	2		6020B	Dissolved
Zinc	17.4		16.0	5.4	ug/L	2		6020B	Dissolved
Sodium	5610		200	75.7	ug/L	2		6020B	Dissolved
Magnesium	3820		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1140		200	64.9	ug/L	2		6020B	Dissolved
Calcium	8680		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	37.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	37.4		5.0	5.0	mg/L	1		SM 2320B	Total/NA

Client Sample ID: TB-06-083118 — Lab Sample ID: 460-163741-17

No Detections.

Client Sample ID: RW-4A-(113-123)-083018 — Lab Sample ID: 460-163741-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.48	J	1.0	0.16	ug/L	1		8260C	Total/NA
Hexachlorobenzene	0.034	*	0.020	0.013	ug/L	1		8270D SIM	Total/NA
Chloride	1.90		0.12	0.078	mg/L	1		9056A	Total/NA
Sulfate	15.2		0.60	0.33	mg/L	1		9056A	Total/NA
Barium	14.4		4.0	1.1	ug/L	2		6020B	Total/NA
Nickel	24.0		4.0	1.3	ug/L	2		6020B	Total/NA
Lead	0.76	J	1.2	0.37	ug/L	2		6020B	Total/NA
Antimony	1.5	J	2.0	0.62	ug/L	2		6020B	Total/NA
Zinc	17.6		16.0	5.4	ug/L	2		6020B	Total/NA
Aluminum	18.3	J	40.0	15.0	ug/L	2		6020B	Total/NA
Sodium	5800		200	75.7	ug/L	2		6020B	Total/NA
Magnesium	4680		200	65.7	ug/L	2		6020B	Total/NA
Potassium	1520		200	64.9	ug/L	2		6020B	Total/NA
Calcium	12300		200	67.6	ug/L	2		6020B	Total/NA
Barium	14.1		4.0	1.1	ug/L	2		6020B	Dissolved
Nickel	23.4		4.0	1.3	ug/L	2		6020B	Dissolved
Zinc	14.0	J	16.0	5.4	ug/L	2		6020B	Dissolved
Sodium	6140		200	75.7	ug/L	2		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-4A-(113-123)-083018 (Continued)

Lab Sample ID: 460-163741-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	4850		200	65.7	ug/L	2		6020B	Dissolved
Potassium	1360		200	64.9	ug/L	2		6020B	Dissolved
Calcium	11900		200	67.6	ug/L	2		6020B	Dissolved
Bicarbonate Alkalinity as CaCO3	46.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Alkalinity	46.9		5.0	5.0	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-11S(236-241)-083118
Date Collected: 08/31/18 10:30
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 13:50	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 13:50	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*09/11/18 13:50*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/04/18 22:27	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/04/18 22:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/04/18 22:27	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/04/18 22:27	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/04/18 22:27	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/04/18 22:27	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/04/18 22:27	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/04/18 22:27	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/04/18 22:27	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/04/18 22:27	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/04/18 22:27	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/04/18 22:27	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/04/18 22:27	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/04/18 22:27	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/04/18 22:27	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/04/18 22:27	1
Acetone	5.0	U	5.0	5.0	ug/L			09/04/18 22:27	1
Benzene	0.43	U	1.0	0.43	ug/L			09/04/18 22:27	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/04/18 22:27	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/04/18 22:27	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/04/18 22:27	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/04/18 22:27	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/04/18 22:27	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/04/18 22:27	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/04/18 22:27	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/04/18 22:27	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/04/18 22:27	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/04/18 22:27	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/04/18 22:27	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/04/18 22:27	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/04/18 22:27	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/04/18 22:27	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/04/18 22:27	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/04/18 22:27	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/04/18 22:27	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/04/18 22:27	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/04/18 22:27	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/04/18 22:27	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/04/18 22:27	1
Styrene	0.42	U	1.0	0.42	ug/L			09/04/18 22:27	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/04/18 22:27	1

Client Sample ID: RW-11S(236-241)-083118
Date Collected: 08/31/18 10:30
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			09/04/18 22:27	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/04/18 22:27	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/04/18 22:27	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/04/18 22:27	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/04/18 22:27	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/04/18 22:27	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/04/18 22:27	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethanethiol	*5.1*	*J N*	*ug/L*		*2.67*	*75-08-1*		*09/04/18 22:27*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*		*09/04/18 22:27*	*1*
4-Bromofluorobenzene	*97*		*70 - 130*		*09/04/18 22:27*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*09/04/18 22:27*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/04/18 22:27*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.90**		0.20	0.016	ug/L		09/04/18 10:05	09/05/18 01:40	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*10 - 150*	*09/04/18 10:05*	*09/05/18 01:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 06:57	09/02/18 18:54	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 06:57	09/02/18 18:54	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 06:57	09/02/18 18:54	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		09/02/18 06:57	09/02/18 18:54	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		09/02/18 06:57	09/02/18 18:54	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 06:57	09/02/18 18:54	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		09/02/18 06:57	09/02/18 18:54	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 06:57	09/02/18 18:54	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		09/02/18 06:57	09/02/18 18:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 06:57	09/02/18 20:02	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 06:57	09/02/18 20:02	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 06:57	09/02/18 20:02	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 20:02	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 20:02	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 20:02	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 06:57	09/02/18 20:02	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 06:57	09/02/18 20:02	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 06:57	09/02/18 20:02	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 06:57	09/02/18 20:02	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 06:57	09/02/18 20:02	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 06:57	09/02/18 20:02	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 06:57	09/02/18 20:02	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-11S(236-241)-083118
Date Collected: 08/31/18 10:30
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 06:57	09/02/18 20:02	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 06:57	09/02/18 20:02	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 06:57	09/02/18 20:02	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 06:57	09/02/18 20:02	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 20:02	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 06:57	09/02/18 20:02	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		09/02/18 06:57	09/02/18 20:02	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 20:02	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 06:57	09/02/18 20:02	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 20:02	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 06:57	09/02/18 20:02	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 06:57	09/02/18 20:02	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 06:57	09/02/18 20:02	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 06:57	09/02/18 20:02	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 06:57	09/02/18 20:02	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 20:02	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 20:02	1
2,4-Dinitrophenol	14	U	20	14	ug/L		09/02/18 06:57	09/02/18 20:02	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 06:57	09/02/18 20:02	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 06:57	09/02/18 20:02	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 06:57	09/02/18 20:02	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 06:57	09/02/18 20:02	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 06:57	09/02/18 20:02	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 20:02	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 06:57	09/02/18 20:02	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 06:57	09/02/18 20:02	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 06:57	09/02/18 20:02	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 06:57	09/02/18 20:02	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 06:57	09/02/18 20:02	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 06:57	09/02/18 20:02	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 06:57	09/02/18 20:02	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 06:57	09/02/18 20:02	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 06:57	09/02/18 20:02	1
Di-n-octyl phthalate	4.8	U *	10	4.8	ug/L		09/02/18 06:57	09/02/18 20:02	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 06:57	09/02/18 20:02	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 06:57	09/02/18 20:02	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 20:02	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 06:57	09/02/18 20:02	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 06:57	09/02/18 20:02	1
Caprolactam	0.68	U *	10	0.68	ug/L		09/02/18 06:57	09/02/18 20:02	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 06:57	09/02/18 20:02	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 06:57	09/02/18 20:02	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 20:02	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 20:02	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 06:57	09/02/18 20:02	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 20:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*09/02/18 06:57*	*09/02/18 20:02*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-11S(236-241)-083118
Date Collected: 08/31/18 10:30
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	100		30 - 130	09/02/18 06:57	09/02/18 20:02	1
Phenol-d5 (Surr)	26		15 - 110	09/02/18 06:57	09/02/18 20:02	1
Terphenyl-d14 (Surr)	106		30 - 130	09/02/18 06:57	09/02/18 20:02	1
2,4,6-Tribromophenol (Surr)	113	X	15 - 110	09/02/18 06:57	09/02/18 20:02	1
2-Fluorophenol (Surr)	42		15 - 110	09/02/18 06:57	09/02/18 20:02	1
2-Fluorobiphenyl	96		30 - 130	09/02/18 06:57	09/02/18 20:02	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 05:53	1
PCB-1016	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 05:53	1
PCB-1221	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 05:53	1
PCB-1232	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 05:53	1
PCB-1242	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 05:53	1
PCB-1248	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 05:53	1
PCB-1254	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 05:53	1
PCB-1260	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 05:53	1
PCB-1262	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 05:53	1
PCB-1268	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 05:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	81		30 - 150	09/04/18 18:44	09/07/18 05:53	1
Tetrachloro-m-xylene	68		30 - 150	09/04/18 18:44	09/07/18 05:53	1
DCB Decachlorobiphenyl	81		30 - 150	09/04/18 18:44	09/07/18 05:53	1
DCB Decachlorobiphenyl	72		30 - 150	09/04/18 18:44	09/07/18 05:53	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**0.95**		0.12	0.078	mg/L			09/04/18 18:22	1
Sulfate	**7.53**		0.60	0.33	mg/L			09/04/18 18:22	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/13/18 23:17	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/08/18 03:00	09/13/18 23:17	2
Barium	**17.9**		4.0	1.1	ug/L		09/08/18 03:00	09/13/18 23:17	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/13/18 23:17	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/13/18 23:17	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/13/18 23:17	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/13/18 23:17	2
Copper	**8.4**		4.0	1.9	ug/L		09/08/18 03:00	09/13/18 23:17	2
Manganese	**504**		8.0	2.7	ug/L		09/08/18 03:00	09/13/18 23:17	2
Nickel	**11.2**		4.0	1.3	ug/L		09/08/18 03:00	09/13/18 23:17	2
Lead	**0.44**	**J**	1.2	0.37	ug/L		09/08/18 03:00	09/13/18 23:17	2
Antimony	**2.1**		2.0	0.62	ug/L		09/08/18 03:00	09/13/18 23:17	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/13/18 23:17	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/08/18 03:00	09/13/18 23:17	2
Zinc	**6.9**	**J**	16.0	5.4	ug/L		09/08/18 03:00	09/13/18 23:17	2
Aluminum	**84.0**		40.0	15.0	ug/L		09/08/18 03:00	09/13/18 23:17	2
Sodium	**3430**		200	75.7	ug/L		09/08/18 03:00	09/13/18 23:17	2
Magnesium	**2230**		200	65.7	ug/L		09/08/18 03:00	09/13/18 23:17	2

Client Sample ID: RW-11S(236-241)-083118

Lab Sample ID: 460-163741-1

Date Collected: 08/31/18 10:30

Matrix: Water

Date Received: 08/31/18 19:30

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**1600**		200	64.9	ug/L		09/08/18 03:00	09/13/18 23:17	2
Calcium	**16700**		200	67.6	ug/L		09/08/18 03:00	09/13/18 23:17	2
Iron	**709**		120	45.7	ug/L		09/08/18 03:00	09/13/18 23:17	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/13/18 23:17	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 11:57	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/14/18 11:10	09/14/18 11:57	2
Barium	**17.2**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 11:57	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 11:57	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 11:57	2
Cobalt	**1.3**	**J**	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 11:57	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 11:57	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 11:57	2
Manganese	**525**		8.0	2.7	ug/L		09/14/18 11:10	09/14/18 11:57	2
Nickel	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 11:57	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 11:57	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 11:57	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 11:57	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/14/18 11:10	09/14/18 11:57	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 11:57	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/14/18 11:10	09/14/18 11:57	2
Sodium	**3380**		200	75.7	ug/L		09/14/18 11:10	09/14/18 11:57	2
Magnesium	**2240**		200	65.7	ug/L		09/14/18 11:10	09/14/18 11:57	2
Potassium	**1480**		200	64.9	ug/L		09/14/18 11:10	09/14/18 11:57	2
Calcium	**16400**		200	67.6	ug/L		09/14/18 11:10	09/14/18 11:57	2
Iron	**97.9**	**J**	120	45.7	ug/L		09/14/18 11:10	09/14/18 11:57	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 11:57	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**2.1**		0.20	0.12	ug/L		09/07/18 05:18	09/07/18 09:17	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.1**		0.20	0.12	ug/L		09/07/18 05:55	09/07/18 10:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:08	1
Bicarbonate Alkalinity as CaCO3	**52.7**		5.0	5.0	mg/L			09/04/18 12:16	1
Alkalinity	**52.7**		5.0	5.0	mg/L			09/04/18 12:16	1

Client Sample ID: RW-11D(262-267)-083118

Lab Sample ID: 460-163741-2

Date Collected: 08/31/18 10:15

Matrix: Water

Date Received: 08/31/18 19:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 14:13	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-11D(262-267)-083118
Date Collected: 08/31/18 10:15
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 14:13	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*09/11/18 14:13*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/04/18 22:50	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/04/18 22:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/04/18 22:50	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/04/18 22:50	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/04/18 22:50	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/04/18 22:50	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/04/18 22:50	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/04/18 22:50	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/04/18 22:50	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/04/18 22:50	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/04/18 22:50	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/04/18 22:50	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/04/18 22:50	1
2-Butanone (MEK)	**3.5**	**J**	5.0	1.9	ug/L			09/04/18 22:50	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/04/18 22:50	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/04/18 22:50	1
Acetone	**39**		5.0	5.0	ug/L			09/04/18 22:50	1
Benzene	**11**		1.0	0.43	ug/L			09/04/18 22:50	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/04/18 22:50	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/04/18 22:50	1
Carbon disulfide	**10**		1.0	0.16	ug/L			09/04/18 22:50	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/04/18 22:50	1
Chlorobenzene	**4.8**		1.0	0.38	ug/L			09/04/18 22:50	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/04/18 22:50	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/04/18 22:50	1
Chloroethane	**5.5**		1.0	0.32	ug/L			09/04/18 22:50	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/04/18 22:50	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/04/18 22:50	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/04/18 22:50	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/04/18 22:50	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/04/18 22:50	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/04/18 22:50	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/04/18 22:50	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/04/18 22:50	1
Isopropylbenzene	**0.95**	**J**	1.0	0.34	ug/L			09/04/18 22:50	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/04/18 22:50	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/04/18 22:50	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/04/18 22:50	1
Methylene Chloride	**0.40**	**J**	1.0	0.32	ug/L			09/04/18 22:50	1
Styrene	0.42	U	1.0	0.42	ug/L			09/04/18 22:50	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/04/18 22:50	1
Toluene	0.38	U	1.0	0.38	ug/L			09/04/18 22:50	1

Client Sample ID: RW-11D(262-267)-083118
Date Collected: 08/31/18 10:15
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/04/18 22:50	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/04/18 22:50	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/04/18 22:50	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/04/18 22:50	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/04/18 22:50	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/04/18 22:50	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1-Propene, 2-methyl-	*9.1*	*J N*	*ug/L*		*1.80*	*115-11-7*		*09/04/18 22:50*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*		*09/04/18 22:50*	*1*
4-Bromofluorobenzene	*97*		*70 - 130*		*09/04/18 22:50*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*09/04/18 22:50*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/04/18 22:50*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**41**		0.20	0.016	ug/L		09/04/18 10:05	09/05/18 01:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*35*		*10 - 150*	*09/04/18 10:05*	*09/05/18 01:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 06:57	09/02/18 19:15	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 06:57	09/02/18 19:15	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 06:57	09/02/18 19:15	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		09/02/18 06:57	09/02/18 19:15	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		09/02/18 06:57	09/02/18 19:15	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 06:57	09/02/18 19:15	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		09/02/18 06:57	09/02/18 19:15	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 06:57	09/02/18 19:15	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		09/02/18 06:57	09/02/18 19:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**2.5**	**J**	10	0.29	ug/L		09/02/18 06:57	09/02/18 20:23	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 06:57	09/02/18 20:23	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 06:57	09/02/18 20:23	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 20:23	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 20:23	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 20:23	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 06:57	09/02/18 20:23	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 06:57	09/02/18 20:23	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 06:57	09/02/18 20:23	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 06:57	09/02/18 20:23	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 06:57	09/02/18 20:23	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 06:57	09/02/18 20:23	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 06:57	09/02/18 20:23	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 06:57	09/02/18 20:23	1

Client Sample ID: RW-11D(262-267)-083118
Date Collected: 08/31/18 10:15
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 06:57	09/02/18 20:23	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 06:57	09/02/18 20:23	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 06:57	09/02/18 20:23	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 20:23	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 06:57	09/02/18 20:23	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		09/02/18 06:57	09/02/18 20:23	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 20:23	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 06:57	09/02/18 20:23	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 20:23	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 06:57	09/02/18 20:23	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 06:57	09/02/18 20:23	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 06:57	09/02/18 20:23	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 06:57	09/02/18 20:23	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 06:57	09/02/18 20:23	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 20:23	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 20:23	1
2,4-Dinitrophenol	14	U	20	14	ug/L		09/02/18 06:57	09/02/18 20:23	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 06:57	09/02/18 20:23	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 06:57	09/02/18 20:23	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 06:57	09/02/18 20:23	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 06:57	09/02/18 20:23	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 06:57	09/02/18 20:23	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 20:23	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 06:57	09/02/18 20:23	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 06:57	09/02/18 20:23	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 06:57	09/02/18 20:23	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 06:57	09/02/18 20:23	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 06:57	09/02/18 20:23	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 06:57	09/02/18 20:23	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 06:57	09/02/18 20:23	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 06:57	09/02/18 20:23	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 06:57	09/02/18 20:23	1
Di-n-octyl phthalate	4.8	U *	10	4.8	ug/L		09/02/18 06:57	09/02/18 20:23	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 06:57	09/02/18 20:23	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 06:57	09/02/18 20:23	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 20:23	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 06:57	09/02/18 20:23	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 06:57	09/02/18 20:23	1
Caprolactam	0.68	U *	10	0.68	ug/L		09/02/18 06:57	09/02/18 20:23	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 06:57	09/02/18 20:23	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 06:57	09/02/18 20:23	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 20:23	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 20:23	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 06:57	09/02/18 20:23	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 20:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane	*6.4*	*J N*	*ug/L*		*1.87*	*123-91-1*	*09/02/18 06:57*	*09/02/18 20:23*	*1*
Unknown	*28*	*J*	*ug/L*		*6.67*		*09/02/18 06:57*	*09/02/18 20:23*	*1*
Diethyltoluamide	*7.2*	*J N*	*ug/L*		*7.53*	*134-62-3*	*09/02/18 06:57*	*09/02/18 20:23*	*1*

Client Sample ID: RW-11D(262-267)-083118
Date Collected: 08/31/18 10:15
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-2
Matrix: Water

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
2(3H)-Benzothiazolone	7.1	J N	ug/L		8.02	934-34-9	09/02/18 06:57	09/02/18 20:23	1
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,9-diene-2,8-dione	12	J N	ug/L		8.95	82304-66-3	09/02/18 06:57	09/02/18 20:23	1
Benzenesulfonamide, N-cyclohexyl-4-methyl-	7.9	J N	ug/L		9.92	80-30-8	09/02/18 06:57	09/02/18 20:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	101		30 - 130	09/02/18 06:57	09/02/18 20:23	1
Phenol-d5 (Surr)	24		15 - 110	09/02/18 06:57	09/02/18 20:23	1
Terphenyl-d14 (Surr)	92		30 - 130	09/02/18 06:57	09/02/18 20:23	1
2,4,6-Tribromophenol (Surr)	132	X	15 - 110	09/02/18 06:57	09/02/18 20:23	1
2-Fluorophenol (Surr)	39		15 - 110	09/02/18 06:57	09/02/18 20:23	1
2-Fluorobiphenyl	96		30 - 130	09/02/18 06:57	09/02/18 20:23	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 06:17	1
PCB-1016	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 06:17	1
PCB-1221	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 06:17	1
PCB-1232	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 06:17	1
PCB-1242	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 06:17	1
PCB-1248	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 06:17	1
PCB-1254	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 06:17	1
PCB-1260	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 06:17	1
PCB-1262	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 06:17	1
PCB-1268	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 06:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		30 - 150	09/04/18 18:44	09/07/18 06:17	1
Tetrachloro-m-xylene	75		30 - 150	09/04/18 18:44	09/07/18 06:17	1
DCB Decachlorobiphenyl	79		30 - 150	09/04/18 18:44	09/07/18 06:17	1
DCB Decachlorobiphenyl	80		30 - 150	09/04/18 18:44	09/07/18 06:17	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**3.10**		0.60	0.33	mg/L			09/04/18 18:35	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**33.1**	**D**	1.56	1.01	mg/L			09/05/18 09:50	13

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/13/18 23:21	2
Arsenic	**0.93**	**J**	2.0	0.77	ug/L		09/08/18 03:00	09/13/18 23:21	2
Barium	**80.4**		4.0	1.1	ug/L		09/08/18 03:00	09/13/18 23:21	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/13/18 23:21	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/13/18 23:21	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/13/18 23:21	2
Chromium	**3.9**	**J**	4.0	1.3	ug/L		09/08/18 03:00	09/13/18 23:21	2
Copper	**3.2**	**J**	4.0	1.9	ug/L		09/08/18 03:00	09/13/18 23:21	2

Client Sample ID: RW-11D(262-267)-083118
Date Collected: 08/31/18 10:15
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-2
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	2.7	U	8.0	2.7	ug/L		09/08/18 03:00	09/13/18 23:21	2
Nickel	**9.5**		4.0	1.3	ug/L		09/08/18 03:00	09/13/18 23:21	2
Lead	**0.59**	**J**	1.2	0.37	ug/L		09/08/18 03:00	09/13/18 23:21	2
Antimony	**2.4**		2.0	0.62	ug/L		09/08/18 03:00	09/13/18 23:21	2
Selenium	**1.8**	**J**	10.0	0.69	ug/L		09/08/18 03:00	09/13/18 23:21	2
Vanadium	**1.3**	**J**	4.0	1.2	ug/L		09/08/18 03:00	09/13/18 23:21	2
Zinc	**9.3**	**J**	16.0	5.4	ug/L		09/08/18 03:00	09/13/18 23:21	2
Aluminum	**9820**		40.0	15.0	ug/L		09/08/18 03:00	09/13/18 23:21	2
Sodium	**147000**		200	75.7	ug/L		09/08/18 03:00	09/13/18 23:21	2
Magnesium	65.7	U	200	65.7	ug/L		09/08/18 03:00	09/13/18 23:21	2
Potassium	**38100**		200	64.9	ug/L		09/08/18 03:00	09/13/18 23:21	2
Calcium	**127000**		200	67.6	ug/L		09/08/18 03:00	09/13/18 23:21	2
Iron	**85.6**	**J**	120	45.7	ug/L		09/08/18 03:00	09/13/18 23:21	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/13/18 23:21	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 11:59	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/14/18 11:10	09/14/18 11:59	2
Barium	**49.8**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 11:59	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 11:59	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 11:59	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 11:59	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 11:59	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 11:59	2
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 11:10	09/14/18 11:59	2
Nickel	**9.2**		4.0	1.3	ug/L		09/14/18 11:10	09/14/18 11:59	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 11:59	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 11:59	2
Selenium	**17.8**		10.0	0.69	ug/L		09/14/18 11:10	09/14/18 11:59	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/14/18 11:10	09/14/18 11:59	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 11:59	2
Aluminum	**10200**		40.0	15.0	ug/L		09/14/18 11:10	09/14/18 11:59	2
Sodium	**175000**		200	75.7	ug/L		09/14/18 11:10	09/14/18 11:59	2
Magnesium	65.7	U	200	65.7	ug/L		09/14/18 11:10	09/14/18 11:59	2
Potassium	**34100**		200	64.9	ug/L		09/14/18 11:10	09/14/18 11:59	2
Calcium	**86600**		200	67.6	ug/L		09/14/18 11:10	09/14/18 11:59	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 11:59	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 11:59	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:18	09/07/18 09:18	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 10:40	1

Client Sample ID: RW-11D(262-267)-083118

Lab Sample ID: 460-163741-2
Date Collected: 08/31/18 10:15
Matrix: Water
Date Received: 08/31/18 19:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:09	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			09/04/18 12:30	1
Alkalinity	**573**		5.0	5.0	mg/L			09/04/18 12:30	1

Client Sample ID: RW-14S(135-155)-083118

Lab Sample ID: 460-163741-3
Date Collected: 08/31/18 12:15
Matrix: Water
Date Received: 08/31/18 19:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 22:55	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 22:55	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/11/18 22:55*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/04/18 23:14	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/04/18 23:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/04/18 23:14	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/04/18 23:14	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/04/18 23:14	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/04/18 23:14	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/04/18 23:14	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/04/18 23:14	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/04/18 23:14	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/04/18 23:14	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/04/18 23:14	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/04/18 23:14	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/04/18 23:14	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/04/18 23:14	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/04/18 23:14	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/04/18 23:14	1
Acetone	5.0	U	5.0	5.0	ug/L			09/04/18 23:14	1
Benzene	0.43	U	1.0	0.43	ug/L			09/04/18 23:14	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/04/18 23:14	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/04/18 23:14	1
Carbon disulfide	**0.54**	**J**	1.0	0.16	ug/L			09/04/18 23:14	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/04/18 23:14	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/04/18 23:14	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/04/18 23:14	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/04/18 23:14	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/04/18 23:14	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/04/18 23:14	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/04/18 23:14	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/04/18 23:14	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/04/18 23:14	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/04/18 23:14	1

Client Sample ID: RW-14S(135-155)-083118
Date Collected: 08/31/18 12:15
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/04/18 23:14	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/04/18 23:14	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/04/18 23:14	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/04/18 23:14	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/04/18 23:14	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/04/18 23:14	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/04/18 23:14	1
Methylene Chloride	**0.32**	**J**	1.0	0.32	ug/L			09/04/18 23:14	1
Styrene	0.42	U	1.0	0.42	ug/L			09/04/18 23:14	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/04/18 23:14	1
Toluene	0.38	U	1.0	0.38	ug/L			09/04/18 23:14	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/04/18 23:14	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/04/18 23:14	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/04/18 23:14	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/04/18 23:14	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/04/18 23:14	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/04/18 23:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/04/18 23:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*09/04/18 23:14*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/04/18 23:14*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*09/04/18 23:14*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/04/18 23:14*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/04/18 10:05	09/05/18 00:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*09/04/18 10:05*	*09/05/18 00:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 06:57	09/02/18 19:37	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 06:57	09/02/18 19:37	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 06:57	09/02/18 19:37	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		09/02/18 06:57	09/02/18 19:37	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		09/02/18 06:57	09/02/18 19:37	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 06:57	09/02/18 19:37	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		09/02/18 06:57	09/02/18 19:37	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 06:57	09/02/18 19:37	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		09/02/18 06:57	09/02/18 19:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 06:57	09/02/18 18:59	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 06:57	09/02/18 18:59	1
2-Methylphenol	0.26	U F1	10	0.26	ug/L		09/02/18 06:57	09/02/18 18:59	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-14S(135-155)-083118
Date Collected: 08/31/18 12:15
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 18:59	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 18:59	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 18:59	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 06:57	09/02/18 18:59	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 06:57	09/02/18 18:59	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 06:57	09/02/18 18:59	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 06:57	09/02/18 18:59	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 06:57	09/02/18 18:59	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 06:57	09/02/18 18:59	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 06:57	09/02/18 18:59	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 06:57	09/02/18 18:59	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 06:57	09/02/18 18:59	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 06:57	09/02/18 18:59	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 06:57	09/02/18 18:59	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 18:59	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 06:57	09/02/18 18:59	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		09/02/18 06:57	09/02/18 18:59	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 18:59	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 06:57	09/02/18 18:59	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 18:59	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 06:57	09/02/18 18:59	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 06:57	09/02/18 18:59	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 06:57	09/02/18 18:59	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 06:57	09/02/18 18:59	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 06:57	09/02/18 18:59	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 18:59	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 18:59	1
2,4-Dinitrophenol	14	U	20	14	ug/L		09/02/18 06:57	09/02/18 18:59	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 06:57	09/02/18 18:59	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 06:57	09/02/18 18:59	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 06:57	09/02/18 18:59	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 06:57	09/02/18 18:59	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 06:57	09/02/18 18:59	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 18:59	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 06:57	09/02/18 18:59	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 06:57	09/02/18 18:59	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 06:57	09/02/18 18:59	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 06:57	09/02/18 18:59	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 06:57	09/02/18 18:59	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 06:57	09/02/18 18:59	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 06:57	09/02/18 18:59	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 06:57	09/02/18 18:59	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 06:57	09/02/18 18:59	1
Di-n-octyl phthalate	4.8	U F1 *	10	4.8	ug/L		09/02/18 06:57	09/02/18 18:59	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 06:57	09/02/18 18:59	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 06:57	09/02/18 18:59	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 18:59	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 06:57	09/02/18 18:59	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 06:57	09/02/18 18:59	1

Client Sample ID: RW-14S(135-155)-083118
Date Collected: 08/31/18 12:15
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	0.68	U *	10	0.68	ug/L		09/02/18 06:57	09/02/18 18:59	1
Atrazine	1.3	U F1 *	2.0	1.3	ug/L		09/02/18 06:57	09/02/18 18:59	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 06:57	09/02/18 18:59	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 18:59	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 18:59	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 06:57	09/02/18 18:59	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 18:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Sulfur	*22*	*J N*	*ug/L*		*7.47*	*13798-23-7*	*09/02/18 06:57*	*09/02/18 18:59*	*1*
Benzenesulfonamide, N-butyl-	*3900*	*J N*	*ug/L*		*8.58*	*3622-84-2*	*09/02/18 06:57*	*09/02/18 18:59*	*1*
Cyclic octaatomic sulfur	*37*	*J N*	*ug/L*		*9.65*	*10544-50-0*	*09/02/18 06:57*	*09/02/18 18:59*	*1*
Cyclic octaatomic sulfur	*16*	*J N*	*ug/L*		*9.75*	*10544-50-0*	*09/02/18 06:57*	*09/02/18 18:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*75*		*30 - 130*	*09/02/18 06:57*	*09/02/18 18:59*	*1*
Phenol-d5 (Surr)	*20*		*15 - 110*	*09/02/18 06:57*	*09/02/18 18:59*	*1*
Terphenyl-d14 (Surr)	*76*		*30 - 130*	*09/02/18 06:57*	*09/02/18 18:59*	*1*
2,4,6-Tribromophenol (Surr)	*124*	*X*	*15 - 110*	*09/02/18 06:57*	*09/02/18 18:59*	*1*
2-Fluorophenol (Surr)	*31*		*15 - 110*	*09/02/18 06:57*	*09/02/18 18:59*	*1*
2-Fluorobiphenyl	*77*		*30 - 130*	*09/02/18 06:57*	*09/02/18 18:59*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 12:14	1
PCB-1016	0.12	U F2	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 12:14	1
PCB-1221	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 12:14	1
PCB-1232	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 12:14	1
PCB-1242	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 12:14	1
PCB-1248	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 12:14	1
PCB-1254	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 12:14	1
PCB-1260	0.11	U F2	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 12:14	1
PCB-1262	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 12:14	1
PCB-1268	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 12:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*30 - 150*	*09/04/18 18:44*	*09/07/18 12:14*	*1*
Tetrachloro-m-xylene	*35*	** p*	*30 - 150*	*09/04/18 18:44*	*09/07/18 12:14*	*1*
DCB Decachlorobiphenyl	*89*		*30 - 150*	*09/04/18 18:44*	*09/07/18 12:14*	*1*
DCB Decachlorobiphenyl	*40*	** p*	*30 - 150*	*09/04/18 18:44*	*09/07/18 12:14*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**1.92**		0.60	0.33	mg/L			09/04/18 16:51	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36.7**	**D**	1.80	1.17	mg/L			09/05/18 08:57	15

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-14S(135-155)-083118
Date Collected: 08/31/18 12:15
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-3
Matrix: Water

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/12/18 14:16	2
Arsenic	**1.4**	**J**	2.0	0.77	ug/L		09/08/18 03:00	09/12/18 14:16	2
Barium	**9.5**		4.0	1.1	ug/L		09/08/18 03:00	09/12/18 14:16	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/12/18 14:16	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/12/18 14:16	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/12/18 14:16	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/12/18 14:16	2
Copper	1.9	U	4.0	1.9	ug/L		09/08/18 03:00	09/12/18 14:16	2
Manganese	**60.2**		8.0	2.7	ug/L		09/08/18 03:00	09/12/18 14:16	2
Nickel	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/12/18 14:16	2
Lead	0.37	U	1.2	0.37	ug/L		09/08/18 03:00	09/12/18 14:16	2
Antimony	**0.65**	**J**	2.0	0.62	ug/L		09/08/18 03:00	09/12/18 14:16	2
Selenium	0.69	U F1	10.0	0.69	ug/L		09/08/18 03:00	09/12/18 14:16	2
Vanadium	**1.8**	**J**	4.0	1.2	ug/L		09/08/18 03:00	09/12/18 14:16	2
Zinc	5.4	U	16.0	5.4	ug/L		09/08/18 03:00	09/12/18 14:16	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/08/18 03:00	09/12/18 14:16	2
Sodium	**43600**		200	75.7	ug/L		09/08/18 03:00	09/12/18 14:16	2
Magnesium	**11900**		200	65.7	ug/L		09/08/18 03:00	09/12/18 14:16	2
Potassium	**2960**		200	64.9	ug/L		09/08/18 03:00	09/12/18 14:16	2
Calcium	**44200**		200	67.6	ug/L		09/08/18 03:00	09/12/18 14:16	2
Iron	**58.8**	**J**	120	45.7	ug/L		09/08/18 03:00	09/12/18 14:16	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/12/18 14:16	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 11:51	2
Arsenic	**2.1**		2.0	0.77	ug/L		09/14/18 11:10	09/14/18 11:51	2
Barium	**9.6**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 11:51	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 11:51	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 11:51	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 11:51	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 11:51	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 11:51	2
Manganese	**46.4**		8.0	2.7	ug/L		09/14/18 11:10	09/14/18 11:51	2
Nickel	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 11:51	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 11:51	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 11:51	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 11:51	2
Vanadium	**1.4**	**J**	4.0	1.2	ug/L		09/14/18 11:10	09/14/18 11:51	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 11:51	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/14/18 11:10	09/14/18 11:51	2
Sodium	**46800**		200	75.7	ug/L		09/14/18 11:10	09/14/18 11:51	2
Magnesium	**12300**		200	65.7	ug/L		09/14/18 11:10	09/14/18 11:51	2
Potassium	**2830**		200	64.9	ug/L		09/14/18 11:10	09/14/18 11:51	2
Calcium	**43500**		200	67.6	ug/L		09/14/18 11:10	09/14/18 11:51	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 11:51	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 11:51	2

Client Sample ID: RW-14S(135-155)-083118

Lab Sample ID: 460-163741-3
Date Collected: 08/31/18 12:15
Matrix: Water
Date Received: 08/31/18 19:30

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:18	09/07/18 08:51	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 10:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:10	1
Bicarbonate Alkalinity as CaCO3	**190**		5.0	5.0	mg/L			09/04/18 11:20	1
Alkalinity	**190**		5.0	5.0	mg/L			09/04/18 11:20	1

Client Sample ID: RW-15S(110-120)-083118

Lab Sample ID: 460-163741-4
Date Collected: 08/31/18 13:20
Matrix: Water
Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 14:36	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 14:36	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*09/11/18 14:36*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/04/18 23:38	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/04/18 23:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/04/18 23:38	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/04/18 23:38	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/04/18 23:38	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/04/18 23:38	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/04/18 23:38	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/04/18 23:38	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/04/18 23:38	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/04/18 23:38	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/04/18 23:38	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/04/18 23:38	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/04/18 23:38	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/04/18 23:38	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/04/18 23:38	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/04/18 23:38	1
Acetone	**12**		5.0	5.0	ug/L			09/04/18 23:38	1
Benzene	0.43	U	1.0	0.43	ug/L			09/04/18 23:38	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/04/18 23:38	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/04/18 23:38	1
Carbon disulfide	**4.3**		1.0	0.16	ug/L			09/04/18 23:38	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/04/18 23:38	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/04/18 23:38	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/04/18 23:38	1

Client Sample ID: RW-15S(110-120)-083118
Date Collected: 08/31/18 13:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/04/18 23:38	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/04/18 23:38	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/04/18 23:38	1
Chloromethane	**0.42**	**J**	1.0	0.14	ug/L			09/04/18 23:38	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/04/18 23:38	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/04/18 23:38	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/04/18 23:38	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/04/18 23:38	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/04/18 23:38	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/04/18 23:38	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/04/18 23:38	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/04/18 23:38	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/04/18 23:38	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/04/18 23:38	1
Methylene Chloride	**0.44**	**J**	1.0	0.32	ug/L			09/04/18 23:38	1
Styrene	0.42	U	1.0	0.42	ug/L			09/04/18 23:38	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/04/18 23:38	1
Toluene	**1.0**		1.0	0.38	ug/L			09/04/18 23:38	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/04/18 23:38	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/04/18 23:38	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/04/18 23:38	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/04/18 23:38	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/04/18 23:38	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/04/18 23:38	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/04/18 23:38*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*09/04/18 23:38*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/04/18 23:38*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*09/04/18 23:38*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*09/04/18 23:38*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/04/18 10:05	09/05/18 02:15	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*09/04/18 10:05*	*09/05/18 02:15*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 06:57	09/02/18 19:58	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 06:57	09/02/18 19:58	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 06:57	09/02/18 19:58	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		09/02/18 06:57	09/02/18 19:58	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		09/02/18 06:57	09/02/18 19:58	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 06:57	09/02/18 19:58	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		09/02/18 06:57	09/02/18 19:58	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 06:57	09/02/18 19:58	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-15S(110-120)-083118
Date Collected: 08/31/18 13:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-4
Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		09/02/18 06:57	09/02/18 19:58	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/05/18 10:46	09/06/18 02:26	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/05/18 10:46	09/06/18 02:26	1
2-Methylphenol	0.26	U *	10	0.26	ug/L		09/05/18 10:46	09/06/18 02:26	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/05/18 10:46	09/06/18 02:26	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/05/18 10:46	09/06/18 02:26	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/05/18 10:46	09/06/18 02:26	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/05/18 10:46	09/06/18 02:26	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/05/18 10:46	09/06/18 02:26	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/05/18 10:46	09/06/18 02:26	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/05/18 10:46	09/06/18 02:26	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/05/18 10:46	09/06/18 02:26	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/05/18 10:46	09/06/18 02:26	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/05/18 10:46	09/06/18 02:26	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/05/18 10:46	09/06/18 02:26	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/05/18 10:46	09/06/18 02:26	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/05/18 10:46	09/06/18 02:26	1
Isophorone	0.80	U	10	0.80	ug/L		09/05/18 10:46	09/06/18 02:26	1
Naphthalene	1.1	U	10	1.1	ug/L		09/05/18 10:46	09/06/18 02:26	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/05/18 10:46	09/06/18 02:26	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		09/05/18 10:46	09/06/18 02:26	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/05/18 10:46	09/06/18 02:26	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/05/18 10:46	09/06/18 02:26	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/05/18 10:46	09/06/18 02:26	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/05/18 10:46	09/06/18 02:26	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/05/18 10:46	09/06/18 02:26	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/05/18 10:46	09/06/18 02:26	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/05/18 10:46	09/06/18 02:26	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/05/18 10:46	09/06/18 02:26	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/05/18 10:46	09/06/18 02:26	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/05/18 10:46	09/06/18 02:26	1
2,4-Dinitrophenol	14	U	20	14	ug/L		09/05/18 10:46	09/06/18 02:26	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/05/18 10:46	09/06/18 02:26	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/05/18 10:46	09/06/18 02:26	1
Fluorene	0.91	U	10	0.91	ug/L		09/05/18 10:46	09/06/18 02:26	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/05/18 10:46	09/06/18 02:26	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/05/18 10:46	09/06/18 02:26	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/05/18 10:46	09/06/18 02:26	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/05/18 10:46	09/06/18 02:26	1
Anthracene	0.63	U	10	0.63	ug/L		09/05/18 10:46	09/06/18 02:26	1
Carbazole	0.68	U	10	0.68	ug/L		09/05/18 10:46	09/06/18 02:26	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/05/18 10:46	09/06/18 02:26	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/05/18 10:46	09/06/18 02:26	1
Pyrene	1.6	U	10	1.6	ug/L		09/05/18 10:46	09/06/18 02:26	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/05/18 10:46	09/06/18 02:26	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/05/18 10:46	09/06/18 02:26	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/05/18 10:46	09/06/18 02:26	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-15S(110-120)-083118
Date Collected: 08/31/18 13:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/05/18 10:46	09/06/18 02:26	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/05/18 10:46	09/06/18 02:26	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/05/18 10:46	09/06/18 02:26	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/05/18 10:46	09/06/18 02:26	1
Acetophenone	0.79	U	10	0.79	ug/L		09/05/18 10:46	09/06/18 02:26	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/05/18 10:46	09/06/18 02:26	1
Caprolactam	0.68	U	10	0.68	ug/L		09/05/18 10:46	09/06/18 02:26	1
Atrazine	1.3	U	2.0	1.3	ug/L		09/05/18 10:46	09/06/18 02:26	1
2,2'-oxybis[1-chloropropane]	0.63	U *	10	0.63	ug/L		09/05/18 10:46	09/06/18 02:26	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/05/18 10:46	09/06/18 02:26	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/05/18 10:46	09/06/18 02:26	1
3,3'-Dichlorobenzidine	1.4	U *	10	1.4	ug/L		09/05/18 10:46	09/06/18 02:26	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/05/18 10:46	09/06/18 02:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)-	*11*	*J N*	*ug/L*		*4.51*	*5989-54-8*	*09/05/18 10:46*	*09/06/18 02:26*	*1*
Ethanol, 2-(2-butoxyethoxy)-	*23*	*J N*	*ug/L*		*5.57*	*112-34-5*	*09/05/18 10:46*	*09/06/18 02:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*74*		*30 - 130*	*09/05/18 10:46*	*09/06/18 02:26*	*1*
Phenol-d5 (Surr)	*21*		*15 - 110*	*09/05/18 10:46*	*09/06/18 02:26*	*1*
Terphenyl-d14 (Surr)	*82*		*30 - 130*	*09/05/18 10:46*	*09/06/18 02:26*	*1*
2,4,6-Tribromophenol (Surr)	*93*		*15 - 110*	*09/05/18 10:46*	*09/06/18 02:26*	*1*
2-Fluorophenol (Surr)	*34*		*15 - 110*	*09/05/18 10:46*	*09/06/18 02:26*	*1*
2-Fluorobiphenyl	*81*		*30 - 130*	*09/05/18 10:46*	*09/06/18 02:26*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 06:40	1
PCB-1016	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 06:40	1
PCB-1221	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 06:40	1
PCB-1232	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 06:40	1
PCB-1242	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 06:40	1
PCB-1248	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 06:40	1
PCB-1254	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 06:40	1
PCB-1260	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 06:40	1
PCB-1262	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 06:40	1
PCB-1268	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 06:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*	*p*	*30 - 150*	*09/04/18 18:44*	*09/07/18 06:40*	*1*
Tetrachloro-m-xylene	*127*		*30 - 150*	*09/04/18 18:44*	*09/07/18 06:40*	*1*
DCB Decachlorobiphenyl	*86*		*30 - 150*	*09/04/18 18:44*	*09/07/18 06:40*	*1*
DCB Decachlorobiphenyl	*84*		*30 - 150*	*09/04/18 18:44*	*09/07/18 06:40*	*1*

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.8**	**D**	0.96	0.62	mg/L			09/05/18 10:30	8
Sulfate	**102**	**D**	4.80	2.66	mg/L			09/05/18 10:30	8

Client Sample ID: RW-15S(110-120)-083118
Date Collected: 08/31/18 13:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-4
Matrix: Water

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/13/18 23:31	2
Arsenic	**23.5**		2.0	0.77	ug/L		09/08/18 03:00	09/13/18 23:31	2
Barium	**5.2**		4.0	1.1	ug/L		09/08/18 03:00	09/13/18 23:31	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/13/18 23:31	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/13/18 23:31	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/13/18 23:31	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/13/18 23:31	2
Copper	1.9	U	4.0	1.9	ug/L		09/08/18 03:00	09/13/18 23:31	2
Manganese	2.7	U	8.0	2.7	ug/L		09/08/18 03:00	09/13/18 23:31	2
Nickel	**4.9**		4.0	1.3	ug/L		09/08/18 03:00	09/13/18 23:31	2
Lead	**0.51**	**J**	1.2	0.37	ug/L		09/08/18 03:00	09/13/18 23:31	2
Antimony	**2.4**		2.0	0.62	ug/L		09/08/18 03:00	09/13/18 23:31	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/13/18 23:31	2
Vanadium	**10.2**		4.0	1.2	ug/L		09/08/18 03:00	09/13/18 23:31	2
Zinc	5.4	U	16.0	5.4	ug/L		09/08/18 03:00	09/13/18 23:31	2
Aluminum	**87.8**		40.0	15.0	ug/L		09/08/18 03:00	09/13/18 23:31	2
Sodium	**55700**		200	75.7	ug/L		09/08/18 03:00	09/13/18 23:31	2
Magnesium	**1340**		200	65.7	ug/L		09/08/18 03:00	09/13/18 23:31	2
Potassium	**4330**		200	64.9	ug/L		09/08/18 03:00	09/13/18 23:31	2
Calcium	**39800**		200	67.6	ug/L		09/08/18 03:00	09/13/18 23:31	2
Iron	**71.6**	**J**	120	45.7	ug/L		09/08/18 03:00	09/13/18 23:31	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/13/18 23:31	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 12:05	2
Arsenic	**31.0**		2.0	0.77	ug/L		09/14/18 11:10	09/14/18 12:05	2
Barium	**5.2**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 12:05	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 12:05	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 12:05	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:05	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:05	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 12:05	2
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 11:10	09/14/18 12:05	2
Nickel	**1.5**	**J**	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:05	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 12:05	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 12:05	2
Selenium	**1.4**	**J**	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 12:05	2
Vanadium	**11.0**		4.0	1.2	ug/L		09/14/18 11:10	09/14/18 12:05	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 12:05	2
Aluminum	**46.8**		40.0	15.0	ug/L		09/14/18 11:10	09/14/18 12:05	2
Sodium	**63300**		200	75.7	ug/L		09/14/18 11:10	09/14/18 12:05	2
Magnesium	**1140**		200	65.7	ug/L		09/14/18 11:10	09/14/18 12:05	2
Potassium	**4220**		200	64.9	ug/L		09/14/18 11:10	09/14/18 12:05	2
Calcium	**40300**		200	67.6	ug/L		09/14/18 11:10	09/14/18 12:05	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 12:05	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 12:05	2

Client Sample ID: RW-15S(110-120)-083118

Lab Sample ID: 460-163741-4
Date Collected: 08/31/18 13:20
Matrix: Water
Date Received: 08/31/18 19:30

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:18	09/07/18 09:20	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 10:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:16	1
Bicarbonate Alkalinity as CaCO3	**9.7**		5.0	5.0	mg/L			09/04/18 12:39	1
Alkalinity	**98.0**		5.0	5.0	mg/L			09/04/18 12:39	1

Client Sample ID: RW-15D(127-137)-083118

Lab Sample ID: 460-163741-5
Date Collected: 08/31/18 14:00
Matrix: Water
Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 15:00	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 15:00	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*09/11/18 15:00*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/05/18 00:02	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/05/18 00:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/05/18 00:02	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 00:02	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/05/18 00:02	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/05/18 00:02	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/05/18 00:02	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/05/18 00:02	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/05/18 00:02	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 00:02	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/05/18 00:02	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/05/18 00:02	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/05/18 00:02	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/05/18 00:02	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/05/18 00:02	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/05/18 00:02	1
Acetone	**41**		5.0	5.0	ug/L			09/05/18 00:02	1
Benzene	0.43	U	1.0	0.43	ug/L			09/05/18 00:02	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/05/18 00:02	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/05/18 00:02	1
Carbon disulfide	**11**		1.0	0.16	ug/L			09/05/18 00:02	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/05/18 00:02	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/05/18 00:02	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/05/18 00:02	1

Client Sample ID: RW-15D(127-137)-083118
Date Collected: 08/31/18 14:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/05/18 00:02	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/05/18 00:02	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/05/18 00:02	1
Chloromethane	**0.48**	**J**	1.0	0.14	ug/L			09/05/18 00:02	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/05/18 00:02	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/05/18 00:02	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/05/18 00:02	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/05/18 00:02	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/05/18 00:02	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/05/18 00:02	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/05/18 00:02	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/05/18 00:02	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/05/18 00:02	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/05/18 00:02	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/05/18 00:02	1
Styrene	0.42	U	1.0	0.42	ug/L			09/05/18 00:02	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/05/18 00:02	1
Toluene	**1.5**		1.0	0.38	ug/L			09/05/18 00:02	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/05/18 00:02	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/05/18 00:02	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/05/18 00:02	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/05/18 00:02	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/05/18 00:02	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/05/18 00:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/05/18 00:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*		*09/05/18 00:02*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*09/05/18 00:02*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*09/05/18 00:02*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*09/05/18 00:02*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.49**		0.20	0.016	ug/L		09/04/18 10:05	09/05/18 02:33	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*10 - 150*	*09/04/18 10:05*	*09/05/18 02:33*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 06:57	09/02/18 20:19	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 06:57	09/02/18 20:19	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 06:57	09/02/18 20:19	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		09/02/18 06:57	09/02/18 20:19	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		09/02/18 06:57	09/02/18 20:19	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 06:57	09/02/18 20:19	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		09/02/18 06:57	09/02/18 20:19	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 06:57	09/02/18 20:19	1

Client Sample ID: RW-15D(127-137)-083118
Date Collected: 08/31/18 14:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-5
Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		09/02/18 06:57	09/02/18 20:19	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**12**		10	0.29	ug/L		09/02/18 06:57	09/02/18 21:05	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 06:57	09/02/18 21:05	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 06:57	09/02/18 21:05	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 21:05	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 21:05	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 21:05	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 06:57	09/02/18 21:05	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 06:57	09/02/18 21:05	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 06:57	09/02/18 21:05	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 06:57	09/02/18 21:05	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 06:57	09/02/18 21:05	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 06:57	09/02/18 21:05	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 06:57	09/02/18 21:05	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 06:57	09/02/18 21:05	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 06:57	09/02/18 21:05	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 06:57	09/02/18 21:05	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 06:57	09/02/18 21:05	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 21:05	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 06:57	09/02/18 21:05	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		09/02/18 06:57	09/02/18 21:05	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 21:05	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 06:57	09/02/18 21:05	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 21:05	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 06:57	09/02/18 21:05	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 06:57	09/02/18 21:05	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 06:57	09/02/18 21:05	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 06:57	09/02/18 21:05	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 06:57	09/02/18 21:05	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 21:05	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 21:05	1
2,4-Dinitrophenol	14	U	20	14	ug/L		09/02/18 06:57	09/02/18 21:05	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 06:57	09/02/18 21:05	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 06:57	09/02/18 21:05	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 06:57	09/02/18 21:05	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 06:57	09/02/18 21:05	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 06:57	09/02/18 21:05	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 21:05	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 06:57	09/02/18 21:05	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 06:57	09/02/18 21:05	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 06:57	09/02/18 21:05	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 06:57	09/02/18 21:05	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 06:57	09/02/18 21:05	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 06:57	09/02/18 21:05	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 06:57	09/02/18 21:05	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 06:57	09/02/18 21:05	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 06:57	09/02/18 21:05	1

Client Sample ID: RW-15D(127-137)-083118
Date Collected: 08/31/18 14:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	4.8	U *	10	4.8	ug/L		09/02/18 06:57	09/02/18 21:05	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 06:57	09/02/18 21:05	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 06:57	09/02/18 21:05	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 21:05	1
Acetophenone	**1.4**	**J**	10	0.79	ug/L		09/02/18 06:57	09/02/18 21:05	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 06:57	09/02/18 21:05	1
Caprolactam	0.68	U *	10	0.68	ug/L		09/02/18 06:57	09/02/18 21:05	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 06:57	09/02/18 21:05	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 06:57	09/02/18 21:05	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 21:05	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 21:05	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 06:57	09/02/18 21:05	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 21:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*12*	*J*	*ug/L*		*2.81*		*09/02/18 06:57*	*09/02/18 21:05*	*1*
Unknown	*8.1*	*J*	*ug/L*		*2.90*		*09/02/18 06:57*	*09/02/18 21:05*	*1*
Ethanol, 2-butoxy-	*21*	*J N*	*ug/L*		*3.35*	*111-76-2*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
Unknown	*7.3*	*J*	*ug/L*		*4.65*		*09/02/18 06:57*	*09/02/18 21:05*	*1*
Benzoic Acid	*23*	*J N*	*ug/L*		*5.31*	*65-85-0*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
Ethanol, 1-(2-butoxyethoxy)-	*68*	*J N*	*ug/L*		*5.44*	*54446-78-5*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
Propanedioic acid, phenyl-	*16*	*J N*	*ug/L*		*5.79*	*2613-89-0*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
Unknown	*7.3*	*J*	*ug/L*		*5.88*		*09/02/18 06:57*	*09/02/18 21:05*	*1*
Indolizine	*6.5*	*J N*	*ug/L*		*6.12*	*274-40-8*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
Vanillin	*14*	*J N*	*ug/L*		*6.67*	*121-33-5*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
Dodecanoic acid	*12*	*J N*	*ug/L*		*7.40*	*143-07-7*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
Diethyltoluamide	*7.5*	*J N*	*ug/L*		*7.54*	*134-62-3*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
Benzenesulfonamide, N-butyl-	*4100*	*J N*	*ug/L*		*8.60*	*3622-84-2*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
Unknown	*6.9*	*J*	*ug/L*		*9.15*		*09/02/18 06:57*	*09/02/18 21:05*	*1*
Unknown	*7.7*	*J*	*ug/L*		*9.50*		*09/02/18 06:57*	*09/02/18 21:05*	*1*
Unknown	*34*	*J*	*ug/L*		*9.89*		*09/02/18 06:57*	*09/02/18 21:05*	*1*
Unknown	*8.9*	*J*	*ug/L*		*9.93*		*09/02/18 06:57*	*09/02/18 21:05*	*1*
Unknown	*7.2*	*J*	*ug/L*		*10.43*		*09/02/18 06:57*	*09/02/18 21:05*	*1*
Unknown	*20*	*J*	*ug/L*		*15.08*		*09/02/18 06:57*	*09/02/18 21:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*106*		*30 - 130*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
Phenol-d5 (Surr)	*26*		*15 - 110*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
Terphenyl-d14 (Surr)	*99*		*30 - 130*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
2,4,6-Tribromophenol (Surr)	*137*	*X*	*15 - 110*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
2-Fluorophenol (Surr)	*41*		*15 - 110*	*09/02/18 06:57*	*09/02/18 21:05*	*1*
2-Fluorobiphenyl	*109*		*30 - 130*	*09/02/18 06:57*	*09/02/18 21:05*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:04	1
PCB-1016	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:04	1
PCB-1221	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:04	1
PCB-1232	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:04	1
PCB-1242	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:04	1

Client Sample ID: RW-15D(127-137)-083118
Date Collected: 08/31/18 14:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-5
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:04	1
PCB-1254	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 07:04	1
PCB-1260	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 07:04	1
PCB-1262	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 07:04	1
PCB-1268	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 07:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*30 - 150*	*09/04/18 18:44*	*09/07/18 07:04*	*1*
Tetrachloro-m-xylene	*89*		*30 - 150*	*09/04/18 18:44*	*09/07/18 07:04*	*1*
DCB Decachlorobiphenyl	*85*		*30 - 150*	*09/04/18 18:44*	*09/07/18 07:04*	*1*
DCB Decachlorobiphenyl	*85*		*30 - 150*	*09/04/18 18:44*	*09/07/18 07:04*	*1*

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26.3**	**D**	2.04	1.33	mg/L			09/05/18 10:43	17
Sulfate	**232**	**D**	10.2	5.64	mg/L			09/05/18 10:43	17

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/13/18 23:41	2
Arsenic	**6.8**		2.0	0.77	ug/L		09/08/18 03:00	09/13/18 23:41	2
Barium	**16.7**		4.0	1.1	ug/L		09/08/18 03:00	09/13/18 23:41	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/13/18 23:41	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/13/18 23:41	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/13/18 23:41	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/13/18 23:41	2
Copper	1.9	U	4.0	1.9	ug/L		09/08/18 03:00	09/13/18 23:41	2
Manganese	2.7	U	8.0	2.7	ug/L		09/08/18 03:00	09/13/18 23:41	2
Nickel	**8.4**		4.0	1.3	ug/L		09/08/18 03:00	09/13/18 23:41	2
Lead	0.37	U	1.2	0.37	ug/L		09/08/18 03:00	09/13/18 23:41	2
Antimony	**2.1**		2.0	0.62	ug/L		09/08/18 03:00	09/13/18 23:41	2
Selenium	**5.2**	**J**	10.0	0.69	ug/L		09/08/18 03:00	09/13/18 23:41	2
Vanadium	**36.3**		4.0	1.2	ug/L		09/08/18 03:00	09/13/18 23:41	2
Zinc	5.4	U	16.0	5.4	ug/L		09/08/18 03:00	09/13/18 23:41	2
Aluminum	**105**		40.0	15.0	ug/L		09/08/18 03:00	09/13/18 23:41	2
Sodium	**148000**		200	75.7	ug/L		09/08/18 03:00	09/13/18 23:41	2
Magnesium	**96.5**	**J**	200	65.7	ug/L		09/08/18 03:00	09/13/18 23:41	2
Potassium	**22300**		200	64.9	ug/L		09/08/18 03:00	09/13/18 23:41	2
Calcium	**82300**		200	67.6	ug/L		09/08/18 03:00	09/13/18 23:41	2
Iron	**77.3**	**J**	120	45.7	ug/L		09/08/18 03:00	09/13/18 23:41	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/13/18 23:41	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 12:15	2
Arsenic	**8.2**		2.0	0.77	ug/L		09/14/18 11:10	09/14/18 12:15	2
Barium	**16.8**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 12:15	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 12:15	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 12:15	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:15	2

Client Sample ID: RW-15D(127-137)-083118

Lab Sample ID: 460-163741-5

Date Collected: 08/31/18 14:00

Matrix: Water

Date Received: 08/31/18 19:30

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:15	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 12:15	2
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 11:10	09/14/18 12:15	2
Nickel	**8.0**		4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:15	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 12:15	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 12:15	2
Selenium	**12.6**		10.0	0.69	ug/L		09/14/18 11:10	09/14/18 12:15	2
Vanadium	**35.6**		4.0	1.2	ug/L		09/14/18 11:10	09/14/18 12:15	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 12:15	2
Aluminum	**87.8**		40.0	15.0	ug/L		09/14/18 11:10	09/14/18 12:15	2
Sodium	**148000**		200	75.7	ug/L		09/14/18 11:10	09/14/18 12:15	2
Magnesium	**109**	**J**	200	65.7	ug/L		09/14/18 11:10	09/14/18 12:15	2
Potassium	**20100**		200	64.9	ug/L		09/14/18 11:10	09/14/18 12:15	2
Calcium	**79500**		200	67.6	ug/L		09/14/18 11:10	09/14/18 12:15	2
Iron	**55.1**	**J**	120	45.7	ug/L		09/14/18 11:10	09/14/18 12:15	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 12:15	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:18	09/07/18 09:22	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 10:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:17	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			09/04/18 12:49	1
Alkalinity	**204**		5.0	5.0	mg/L			09/04/18 12:49	1

Client Sample ID: DUP-04-083118

Lab Sample ID: 460-163741-6

Date Collected: 08/31/18 12:00

Matrix: Water

Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 15:23	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 15:23	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*70 - 130*		*09/11/18 15:23*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/05/18 00:25	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/05/18 00:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/05/18 00:25	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 00:25	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/05/18 00:25	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: DUP-04-083118
Date Collected: 08/31/18 12:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/05/18 00:25	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/05/18 00:25	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/05/18 00:25	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/05/18 00:25	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 00:25	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/05/18 00:25	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/05/18 00:25	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/05/18 00:25	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/05/18 00:25	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/05/18 00:25	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/05/18 00:25	1
Acetone	**9.0**		5.0	5.0	ug/L			09/05/18 00:25	1
Benzene	0.43	U	1.0	0.43	ug/L			09/05/18 00:25	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/05/18 00:25	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/05/18 00:25	1
Carbon disulfide	**2.4**		1.0	0.16	ug/L			09/05/18 00:25	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/05/18 00:25	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/05/18 00:25	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/05/18 00:25	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/05/18 00:25	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/05/18 00:25	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/05/18 00:25	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/05/18 00:25	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/05/18 00:25	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/05/18 00:25	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/05/18 00:25	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/05/18 00:25	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/05/18 00:25	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/05/18 00:25	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/05/18 00:25	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/05/18 00:25	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/05/18 00:25	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/05/18 00:25	1
Methylene Chloride	**0.45**	**J**	1.0	0.32	ug/L			09/05/18 00:25	1
Styrene	0.42	U	1.0	0.42	ug/L			09/05/18 00:25	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/05/18 00:25	1
Toluene	**0.84**	**J**	1.0	0.38	ug/L			09/05/18 00:25	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/05/18 00:25	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/05/18 00:25	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/05/18 00:25	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/05/18 00:25	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/05/18 00:25	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/05/18 00:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/05/18 00:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*		*09/05/18 00:25*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*09/05/18 00:25*	*1*

Client Sample ID: DUP-04-083118
Date Collected: 08/31/18 12:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*09/05/18 00:25*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/05/18 00:25*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/04/18 10:05	09/05/18 02:51	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*41*		*10 - 150*	*09/04/18 10:05*	*09/05/18 02:51*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 06:57	09/02/18 20:40	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 06:57	09/02/18 20:40	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 06:57	09/02/18 20:40	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		09/02/18 06:57	09/02/18 20:40	1
Dibenz(a,h)anthracene	0.011	U *	0.050	0.011	ug/L		09/02/18 06:57	09/02/18 20:40	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 06:57	09/02/18 20:40	1
Indeno[1,2,3-cd]pyrene	0.036	U *	0.050	0.036	ug/L		09/02/18 06:57	09/02/18 20:40	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 06:57	09/02/18 20:40	1
Pentachlorophenol	0.15	U *	0.20	0.15	ug/L		09/02/18 06:57	09/02/18 20:40	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 06:57	09/02/18 21:26	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 06:57	09/02/18 21:26	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 06:57	09/02/18 21:26	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 21:26	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 21:26	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 21:26	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 06:57	09/02/18 21:26	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 06:57	09/02/18 21:26	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 06:57	09/02/18 21:26	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 06:57	09/02/18 21:26	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 06:57	09/02/18 21:26	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 06:57	09/02/18 21:26	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 06:57	09/02/18 21:26	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 06:57	09/02/18 21:26	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 06:57	09/02/18 21:26	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 06:57	09/02/18 21:26	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 06:57	09/02/18 21:26	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 21:26	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 06:57	09/02/18 21:26	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		09/02/18 06:57	09/02/18 21:26	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 21:26	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 06:57	09/02/18 21:26	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 21:26	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 06:57	09/02/18 21:26	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 06:57	09/02/18 21:26	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 06:57	09/02/18 21:26	1

Client Sample ID: DUP-04-083118
Date Collected: 08/31/18 12:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 06:57	09/02/18 21:26	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 06:57	09/02/18 21:26	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 21:26	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 21:26	1
2,4-Dinitrophenol	14	U	20	14	ug/L		09/02/18 06:57	09/02/18 21:26	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 06:57	09/02/18 21:26	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 06:57	09/02/18 21:26	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 06:57	09/02/18 21:26	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 06:57	09/02/18 21:26	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 06:57	09/02/18 21:26	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 21:26	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 06:57	09/02/18 21:26	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 06:57	09/02/18 21:26	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 06:57	09/02/18 21:26	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 06:57	09/02/18 21:26	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 06:57	09/02/18 21:26	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 06:57	09/02/18 21:26	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 06:57	09/02/18 21:26	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 06:57	09/02/18 21:26	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 06:57	09/02/18 21:26	1
Di-n-octyl phthalate	4.8	U *	10	4.8	ug/L		09/02/18 06:57	09/02/18 21:26	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 06:57	09/02/18 21:26	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 06:57	09/02/18 21:26	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 21:26	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 06:57	09/02/18 21:26	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 06:57	09/02/18 21:26	1
Caprolactam	0.68	U *	10	0.68	ug/L		09/02/18 06:57	09/02/18 21:26	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 06:57	09/02/18 21:26	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 06:57	09/02/18 21:26	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 21:26	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 21:26	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 06:57	09/02/18 21:26	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 21:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethanol, 2-(2-butoxyethoxy)-	*15*	*J N*	*ug/L*		*5.43*	*112-34-5*	*09/02/18 06:57*	*09/02/18 21:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*110*		*30 - 130*	*09/02/18 06:57*	*09/02/18 21:26*	*1*
Phenol-d5 (Surr)	*28*		*15 - 110*	*09/02/18 06:57*	*09/02/18 21:26*	*1*
Terphenyl-d14 (Surr)	*108*		*30 - 130*	*09/02/18 06:57*	*09/02/18 21:26*	*1*
2,4,6-Tribromophenol (Surr)	*135*	*X*	*15 - 110*	*09/02/18 06:57*	*09/02/18 21:26*	*1*
2-Fluorophenol (Surr)	*44*		*15 - 110*	*09/02/18 06:57*	*09/02/18 21:26*	*1*
2-Fluorobiphenyl	*108*		*30 - 130*	*09/02/18 06:57*	*09/02/18 21:26*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:27	1
PCB-1016	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:27	1
PCB-1221	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:27	1

Client Sample ID: DUP-04-083118
Date Collected: 08/31/18 12:00
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Lab Sample ID: 460-163741-6
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:27	1
PCB-1242	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:27	1
PCB-1248	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:27	1
PCB-1254	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 07:27	1
PCB-1260	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 07:27	1
PCB-1262	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 07:27	1
PCB-1268	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 07:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*30 - 150*	*09/04/18 18:44*	*09/07/18 07:27*	*1*
Tetrachloro-m-xylene	*89*		*30 - 150*	*09/04/18 18:44*	*09/07/18 07:27*	*1*
DCB Decachlorobiphenyl	*81*		*30 - 150*	*09/04/18 18:44*	*09/07/18 07:27*	*1*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*09/04/18 18:44*	*09/07/18 07:27*	*1*

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.5**	**D**	0.96	0.62	mg/L			09/05/18 10:57	8
Sulfate	**111**	**D**	4.80	2.66	mg/L			09/05/18 10:57	8

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/14/18 00:02	2
Arsenic	**20.8**		2.0	0.77	ug/L		09/08/18 03:00	09/14/18 00:02	2
Barium	**4.8**		4.0	1.1	ug/L		09/08/18 03:00	09/14/18 00:02	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/14/18 00:02	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/14/18 00:02	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:02	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:02	2
Copper	**2.0**	**J**	4.0	1.9	ug/L		09/08/18 03:00	09/14/18 00:02	2
Manganese	2.7	U	8.0	2.7	ug/L		09/08/18 03:00	09/14/18 00:02	2
Nickel	**2.8**	**J**	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:02	2
Lead	0.37	U	1.2	0.37	ug/L		09/08/18 03:00	09/14/18 00:02	2
Antimony	**2.2**		2.0	0.62	ug/L		09/08/18 03:00	09/14/18 00:02	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/14/18 00:02	2
Vanadium	**8.0**		4.0	1.2	ug/L		09/08/18 03:00	09/14/18 00:02	2
Zinc	5.4	U	16.0	5.4	ug/L		09/08/18 03:00	09/14/18 00:02	2
Aluminum	**86.1**		40.0	15.0	ug/L		09/08/18 03:00	09/14/18 00:02	2
Sodium	**41400**		200	75.7	ug/L		09/08/18 03:00	09/14/18 00:02	2
Magnesium	**2120**		200	65.7	ug/L		09/08/18 03:00	09/14/18 05:23	2
Potassium	**3810**		200	64.9	ug/L		09/08/18 03:00	09/14/18 00:02	2
Calcium	**38600**		200	67.6	ug/L		09/08/18 03:00	09/14/18 00:02	2
Iron	45.7	U	120	45.7	ug/L		09/08/18 03:00	09/14/18 00:02	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/14/18 00:02	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 12:18	2
Arsenic	**28.3**		2.0	0.77	ug/L		09/14/18 11:10	09/14/18 12:18	2
Barium	**4.8**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 12:18	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 12:18	2

Client Sample ID: DUP-04-083118

Lab Sample ID: 460-163741-6

Date Collected: 08/31/18 12:00

Matrix: Water

Date Received: 08/31/18 19:30

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 12:18	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:18	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:18	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 12:18	2
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 11:10	09/14/18 12:18	2
Nickel	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:18	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 12:18	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 12:18	2
Selenium	**1.2**	**J**	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 12:18	2
Vanadium	**8.4**		4.0	1.2	ug/L		09/14/18 11:10	09/14/18 12:18	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 12:18	2
Aluminum	**59.2**		40.0	15.0	ug/L		09/14/18 11:10	09/14/18 12:18	2
Sodium	**49800**		200	75.7	ug/L		09/14/18 11:10	09/14/18 12:18	2
Magnesium	**2050**		200	65.7	ug/L		09/14/18 11:10	09/14/18 12:18	2
Potassium	**3560**		200	64.9	ug/L		09/14/18 11:10	09/14/18 12:18	2
Calcium	**37000**		200	67.6	ug/L		09/14/18 11:10	09/14/18 12:18	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 12:18	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 12:18	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:18	09/07/18 09:24	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 10:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:18	1
Bicarbonate Alkalinity as CaCO3	**18.7**		5.0	5.0	mg/L			09/04/18 12:58	1
Alkalinity	**97.2**		5.0	5.0	mg/L			09/04/18 12:58	1

Client Sample ID: FB-04-083118

Lab Sample ID: 460-163741-7

Date Collected: 08/31/18 08:00

Matrix: Water

Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 09:58	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 09:58	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 09:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*70 - 130*		*09/11/18 09:58*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/05/18 00:49	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/05/18 00:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/05/18 00:49	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: FB-04-083118
Date Collected: 08/31/18 08:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 00:49	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/05/18 00:49	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/05/18 00:49	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/05/18 00:49	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/05/18 00:49	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/05/18 00:49	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 00:49	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/05/18 00:49	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/05/18 00:49	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/05/18 00:49	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/05/18 00:49	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/05/18 00:49	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/05/18 00:49	1
Acetone	5.0	U	5.0	5.0	ug/L			09/05/18 00:49	1
Benzene	0.43	U	1.0	0.43	ug/L			09/05/18 00:49	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/05/18 00:49	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/05/18 00:49	1
Carbon disulfide	**1.0**		1.0	0.16	ug/L			09/05/18 00:49	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/05/18 00:49	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/05/18 00:49	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/05/18 00:49	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/05/18 00:49	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/05/18 00:49	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/05/18 00:49	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/05/18 00:49	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/05/18 00:49	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/05/18 00:49	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/05/18 00:49	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/05/18 00:49	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/05/18 00:49	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/05/18 00:49	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/05/18 00:49	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/05/18 00:49	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/05/18 00:49	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/05/18 00:49	1
Methylene Chloride	**4.9**		1.0	0.32	ug/L			09/05/18 00:49	1
Styrene	0.42	U	1.0	0.42	ug/L			09/05/18 00:49	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/05/18 00:49	1
Toluene	0.38	U	1.0	0.38	ug/L			09/05/18 00:49	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/05/18 00:49	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/05/18 00:49	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/05/18 00:49	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/05/18 00:49	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/05/18 00:49	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/05/18 00:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/05/18 00:49*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: FB-04-083118
Date Collected: 08/31/18 08:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-7
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*09/05/18 00:49*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*09/05/18 00:49*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*09/05/18 00:49*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*09/05/18 00:49*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/04/18 10:05	09/05/18 03:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*41*		*10 - 150*	*09/04/18 10:05*	*09/05/18 03:09*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 16:51	09/05/18 11:15	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 16:51	09/05/18 11:15	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 16:51	09/05/18 11:15	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		09/02/18 16:51	09/05/18 11:15	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		09/02/18 16:51	09/05/18 11:15	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 16:51	09/05/18 11:15	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		09/02/18 16:51	09/05/18 11:15	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 16:51	09/05/18 11:15	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		09/02/18 16:51	09/05/18 11:15	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 16:51	09/04/18 11:48	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 16:51	09/04/18 11:48	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 16:51	09/04/18 11:48	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 11:48	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 11:48	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 11:48	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 16:51	09/04/18 11:48	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 11:48	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 16:51	09/04/18 11:48	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 16:51	09/04/18 11:48	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 16:51	09/04/18 11:48	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 16:51	09/04/18 11:48	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 16:51	09/04/18 11:48	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 16:51	09/04/18 11:48	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 16:51	09/04/18 11:48	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 16:51	09/04/18 11:48	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 16:51	09/04/18 11:48	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 11:48	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 16:51	09/04/18 11:48	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		09/02/18 16:51	09/04/18 11:48	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 11:48	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 16:51	09/04/18 11:48	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 11:48	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 16:51	09/04/18 11:48	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 16:51	09/04/18 11:48	1

Client Sample ID: FB-04-083118
Date Collected: 08/31/18 08:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-7
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 16:51	09/04/18 11:48	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 16:51	09/04/18 11:48	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 16:51	09/04/18 11:48	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 11:48	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 11:48	1
2,4-Dinitrophenol	14	U *	20	14	ug/L		09/02/18 16:51	09/04/18 11:48	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 16:51	09/04/18 11:48	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 16:51	09/04/18 11:48	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 16:51	09/04/18 11:48	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 16:51	09/04/18 11:48	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 16:51	09/04/18 11:48	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 11:48	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 11:48	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 11:48	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 11:48	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 11:48	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 11:48	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 16:51	09/04/18 11:48	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 16:51	09/04/18 11:48	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 16:51	09/04/18 11:48	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 16:51	09/04/18 11:48	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/02/18 16:51	09/04/18 11:48	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 16:51	09/04/18 11:48	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 11:48	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 11:48	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 16:51	09/04/18 11:48	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 16:51	09/04/18 11:48	1
Caprolactam	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 11:48	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 16:51	09/04/18 11:48	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 11:48	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 11:48	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 11:48	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 11:48	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 11:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*09/02/18 16:51*	*09/04/18 11:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*114*		*30 - 130*	*09/02/18 16:51*	*09/04/18 11:48*	*1*
Phenol-d5 (Surr)	*44*		*15 - 110*	*09/02/18 16:51*	*09/04/18 11:48*	*1*
Terphenyl-d14 (Surr)	*115*		*30 - 130*	*09/02/18 16:51*	*09/04/18 11:48*	*1*
2,4,6-Tribromophenol (Surr)	*105*		*15 - 110*	*09/02/18 16:51*	*09/04/18 11:48*	*1*
2-Fluorophenol (Surr)	*64*		*15 - 110*	*09/02/18 16:51*	*09/04/18 11:48*	*1*
2-Fluorobiphenyl	*95*		*30 - 130*	*09/02/18 16:51*	*09/04/18 11:48*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:50	1
PCB-1016	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:50	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: FB-04-083118
Date Collected: 08/31/18 08:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-7
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1221	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:50	1
PCB-1232	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:50	1
PCB-1242	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:50	1
PCB-1248	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 07:50	1
PCB-1254	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 07:50	1
PCB-1260	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 07:50	1
PCB-1262	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 07:50	1
PCB-1268	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 07:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*30 - 150*	*09/04/18 18:44*	*09/07/18 07:50*	*1*
Tetrachloro-m-xylene	*77*		*30 - 150*	*09/04/18 18:44*	*09/07/18 07:50*	*1*
DCB Decachlorobiphenyl	*81*		*30 - 150*	*09/04/18 18:44*	*09/07/18 07:50*	*1*
DCB Decachlorobiphenyl	*81*		*30 - 150*	*09/04/18 18:44*	*09/07/18 07:50*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**0.11**	**J**	0.12	0.078	mg/L			09/04/18 20:06	1
Sulfate	**0.40**	**J**	0.60	0.33	mg/L			09/04/18 20:06	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/14/18 00:15	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/08/18 03:00	09/14/18 00:15	2
Barium	1.1	U	4.0	1.1	ug/L		09/08/18 03:00	09/14/18 00:15	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/14/18 00:15	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/14/18 00:15	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:15	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:15	2
Copper	1.9	U	4.0	1.9	ug/L		09/08/18 03:00	09/14/18 00:15	2
Manganese	2.7	U	8.0	2.7	ug/L		09/08/18 03:00	09/14/18 00:15	2
Nickel	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:15	2
Lead	0.37	U	1.2	0.37	ug/L		09/08/18 03:00	09/14/18 00:15	2
Antimony	**1.9**	**J**	2.0	0.62	ug/L		09/08/18 03:00	09/14/18 00:15	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/14/18 00:15	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/08/18 03:00	09/14/18 00:15	2
Zinc	5.4	U	16.0	5.4	ug/L		09/08/18 03:00	09/14/18 00:15	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/08/18 03:00	09/14/18 00:15	2
Sodium	75.7	U	200	75.7	ug/L		09/08/18 03:00	09/14/18 00:15	2
Magnesium	65.7	U	200	65.7	ug/L		09/08/18 03:00	09/14/18 05:37	2
Potassium	64.9	U	200	64.9	ug/L		09/08/18 03:00	09/14/18 00:15	2
Calcium	67.6	U	200	67.6	ug/L		09/08/18 03:00	09/14/18 00:15	2
Iron	45.7	U	120	45.7	ug/L		09/08/18 03:00	09/14/18 00:15	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/14/18 00:15	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 12:21	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/14/18 11:10	09/14/18 12:21	2
Barium	1.1	U	4.0	1.1	ug/L		09/14/18 11:10	09/14/18 12:21	2

Client Sample ID: FB-04-083118
Lab Sample ID: 460-163741-7
Date Collected: 08/31/18 08:00
Matrix: Water
Date Received: 08/31/18 19:30

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 12:21	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 12:21	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:21	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:21	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 12:21	2
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 11:10	09/14/18 12:21	2
Nickel	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:21	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 12:21	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 12:21	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 12:21	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/14/18 11:10	09/14/18 12:21	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 12:21	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/14/18 11:10	09/14/18 12:21	2
Sodium	75.7	U	200	75.7	ug/L		09/14/18 11:10	09/14/18 12:21	2
Magnesium	65.7	U	200	65.7	ug/L		09/14/18 11:10	09/14/18 12:21	2
Potassium	64.9	U	200	64.9	ug/L		09/14/18 11:10	09/14/18 12:21	2
Calcium	67.6	U	200	67.6	ug/L		09/14/18 11:10	09/14/18 12:21	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 12:21	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 12:21	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:18	09/07/18 09:29	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 10:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:19	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			09/04/18 13:06	1
Alkalinity	5.0	U	5.0	5.0	mg/L			09/04/18 13:06	1

Client Sample ID: RW-14D(175-185)-083118
Lab Sample ID: 460-163741-8
Date Collected: 08/31/18 12:40
Matrix: Water
Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 15:46	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 15:46	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*70 - 130*		*09/11/18 15:46*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/05/18 01:12	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/05/18 01:12	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-14D(175-185)-083118
Date Collected: 08/31/18 12:40
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/05/18 01:12	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 01:12	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/05/18 01:12	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/05/18 01:12	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/05/18 01:12	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/05/18 01:12	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/05/18 01:12	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 01:12	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/05/18 01:12	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/05/18 01:12	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/05/18 01:12	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/05/18 01:12	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/05/18 01:12	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/05/18 01:12	1
Acetone	5.0	U	5.0	5.0	ug/L			09/05/18 01:12	1
Benzene	0.43	U	1.0	0.43	ug/L			09/05/18 01:12	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/05/18 01:12	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/05/18 01:12	1
Carbon disulfide	**0.82**	**J**	1.0	0.16	ug/L			09/05/18 01:12	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/05/18 01:12	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/05/18 01:12	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/05/18 01:12	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/05/18 01:12	1
Chloroethane	**0.60**	**J**	1.0	0.32	ug/L			09/05/18 01:12	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/05/18 01:12	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/05/18 01:12	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/05/18 01:12	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/05/18 01:12	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/05/18 01:12	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/05/18 01:12	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/05/18 01:12	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/05/18 01:12	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/05/18 01:12	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/05/18 01:12	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/05/18 01:12	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/05/18 01:12	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/05/18 01:12	1
Styrene	0.42	U	1.0	0.42	ug/L			09/05/18 01:12	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/05/18 01:12	1
Toluene	0.38	U	1.0	0.38	ug/L			09/05/18 01:12	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/05/18 01:12	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/05/18 01:12	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/05/18 01:12	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/05/18 01:12	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/05/18 01:12	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/05/18 01:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/05/18 01:12*	*1*

Client Sample ID: RW-14D(175-185)-083118
Date Collected: 08/31/18 12:40
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-8
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*		*09/05/18 01:12*	*1*
4-Bromofluorobenzene	*92*		*70 - 130*		*09/05/18 01:12*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*09/05/18 01:12*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*09/05/18 01:12*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.36		0.20	0.016	ug/L		09/04/18 10:05	09/05/18 03:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*32*		*10 - 150*	*09/04/18 10:05*	*09/05/18 03:26*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 16:51	09/05/18 11:37	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 16:51	09/05/18 11:37	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 16:51	09/05/18 11:37	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		09/02/18 16:51	09/05/18 11:37	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		09/02/18 16:51	09/05/18 11:37	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 16:51	09/05/18 11:37	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		09/02/18 16:51	09/05/18 11:37	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 16:51	09/05/18 11:37	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		09/02/18 16:51	09/05/18 11:37	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 16:51	09/04/18 12:09	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 16:51	09/04/18 12:09	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 16:51	09/04/18 12:09	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 12:09	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 12:09	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 12:09	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 16:51	09/04/18 12:09	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 12:09	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 16:51	09/04/18 12:09	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 16:51	09/04/18 12:09	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 16:51	09/04/18 12:09	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 16:51	09/04/18 12:09	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 16:51	09/04/18 12:09	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 16:51	09/04/18 12:09	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 16:51	09/04/18 12:09	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 16:51	09/04/18 12:09	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 16:51	09/04/18 12:09	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 12:09	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 16:51	09/04/18 12:09	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		09/02/18 16:51	09/04/18 12:09	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 12:09	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 16:51	09/04/18 12:09	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 12:09	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 16:51	09/04/18 12:09	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 16:51	09/04/18 12:09	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-14D(175-185)-083118
Date Collected: 08/31/18 12:40
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-8
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 16:51	09/04/18 12:09	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 16:51	09/04/18 12:09	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 16:51	09/04/18 12:09	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 12:09	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 12:09	1
2,4-Dinitrophenol	14	U *	20	14	ug/L		09/02/18 16:51	09/04/18 12:09	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 16:51	09/04/18 12:09	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 16:51	09/04/18 12:09	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 16:51	09/04/18 12:09	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 16:51	09/04/18 12:09	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 16:51	09/04/18 12:09	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 12:09	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 12:09	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 12:09	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 12:09	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 12:09	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 12:09	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 16:51	09/04/18 12:09	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 16:51	09/04/18 12:09	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 16:51	09/04/18 12:09	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 16:51	09/04/18 12:09	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/02/18 16:51	09/04/18 12:09	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 16:51	09/04/18 12:09	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 12:09	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 12:09	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 16:51	09/04/18 12:09	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 16:51	09/04/18 12:09	1
Caprolactam	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 12:09	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 16:51	09/04/18 12:09	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 12:09	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 12:09	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 12:09	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 12:09	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 12:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethanol, 2-(2-butoxyethoxy)-	*56*	*J N*	*ug/L*		*5.26*	*112-34-5*	*09/02/18 16:51*	*09/04/18 12:09*	*1*
Unknown	*94*	*J*	*ug/L*		*8.26*		*09/02/18 16:51*	*09/04/18 12:09*	*1*
Benzenesulfonamide, N-butyl-	*3400*	*J N*	*ug/L*		*8.44*	*3622-84-2*	*09/02/18 16:51*	*09/04/18 12:09*	*1*
Unknown	*7.3*	*J*	*ug/L*		*8.92*		*09/02/18 16:51*	*09/04/18 12:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*109*		*30 - 130*	*09/02/18 16:51*	*09/04/18 12:09*	*1*
Phenol-d5 (Surr)	*39*		*15 - 110*	*09/02/18 16:51*	*09/04/18 12:09*	*1*
Terphenyl-d14 (Surr)	*95*		*30 - 130*	*09/02/18 16:51*	*09/04/18 12:09*	*1*
2,4,6-Tribromophenol (Surr)	*116*	*X*	*15 - 110*	*09/02/18 16:51*	*09/04/18 12:09*	*1*
2-Fluorophenol (Surr)	*58*		*15 - 110*	*09/02/18 16:51*	*09/04/18 12:09*	*1*
2-Fluorobiphenyl	*93*		*30 - 130*	*09/02/18 16:51*	*09/04/18 12:09*	*1*

Client Sample ID: RW-14D(175-185)-083118
Date Collected: 08/31/18 12:40
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-8
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 12:38	1
PCB-1016	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 12:38	1
PCB-1221	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 12:38	1
PCB-1232	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 12:38	1
PCB-1242	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 12:38	1
PCB-1248	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 12:38	1
PCB-1254	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 12:38	1
PCB-1260	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 12:38	1
PCB-1262	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 12:38	1
PCB-1268	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*30 - 150*	*09/04/18 18:44*	*09/07/18 12:38*	*1*
Tetrachloro-m-xylene	*77*		*30 - 150*	*09/04/18 18:44*	*09/07/18 12:38*	*1*
DCB Decachlorobiphenyl	*87*		*30 - 150*	*09/04/18 18:44*	*09/07/18 12:38*	*1*
DCB Decachlorobiphenyl	*88*		*30 - 150*	*09/04/18 18:44*	*09/07/18 12:38*	*1*

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**62.7**	**D**	2.88	1.87	mg/L			09/05/18 11:10	24
Sulfate	**223**	**D**	14.4	7.97	mg/L			09/05/18 11:10	24

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/14/18 00:19	2
Arsenic	**5.2**		2.0	0.77	ug/L		09/08/18 03:00	09/14/18 00:19	2
Barium	**33.4**		4.0	1.1	ug/L		09/08/18 03:00	09/14/18 00:19	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/14/18 00:19	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/14/18 00:19	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:19	2
Chromium	**1.3**	**J**	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:19	2
Copper	**2.5**	**J**	4.0	1.9	ug/L		09/08/18 03:00	09/14/18 00:19	2
Manganese	**556**		8.0	2.7	ug/L		09/08/18 03:00	09/14/18 00:19	2
Nickel	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:19	2
Lead	0.37	U	1.2	0.37	ug/L		09/08/18 03:00	09/14/18 00:19	2
Antimony	**2.1**		2.0	0.62	ug/L		09/08/18 03:00	09/14/18 00:19	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/14/18 00:19	2
Vanadium	**2.2**	**J**	4.0	1.2	ug/L		09/08/18 03:00	09/14/18 00:19	2
Zinc	5.4	U	16.0	5.4	ug/L		09/08/18 03:00	09/14/18 00:19	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/08/18 03:00	09/14/18 00:19	2
Sodium	**202000**		200	75.7	ug/L		09/08/18 03:00	09/14/18 00:19	2
Magnesium	**11200**		200	65.7	ug/L		09/08/18 03:00	09/14/18 05:40	2
Potassium	**5220**		200	64.9	ug/L		09/08/18 03:00	09/14/18 00:19	2
Calcium	**62200**		200	67.6	ug/L		09/08/18 03:00	09/14/18 00:19	2
Iron	**12200**		120	45.7	ug/L		09/08/18 03:00	09/14/18 00:19	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/14/18 00:19	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 12:23	2

Client Sample ID: RW-14D(175-185)-083118

Lab Sample ID: 460-163741-8
Date Collected: 08/31/18 12:40
Matrix: Water
Date Received: 08/31/18 19:30

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.3**	**J**	2.0	0.77	ug/L		09/14/18 11:10	09/14/18 12:23	2
Barium	**24.7**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 12:23	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 12:23	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 12:23	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:23	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:23	2
Copper	**2.2**	**J**	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 12:23	2
Manganese	**552**		8.0	2.7	ug/L		09/14/18 11:10	09/14/18 12:23	2
Nickel	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:23	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 12:23	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 12:23	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 12:23	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/14/18 11:10	09/14/18 12:23	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 12:23	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/14/18 11:10	09/14/18 12:23	2
Sodium	**196000**		200	75.7	ug/L		09/14/18 11:10	09/14/18 12:23	2
Magnesium	**14300**		200	65.7	ug/L		09/14/18 11:10	09/14/18 12:23	2
Potassium	**5100**		200	64.9	ug/L		09/14/18 11:10	09/14/18 12:23	2
Calcium	**62800**		200	67.6	ug/L		09/14/18 11:10	09/14/18 12:23	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 12:23	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 12:23	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:18	09/07/18 09:30	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 10:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:20	1
Bicarbonate Alkalinity as CaCO3	**307**		5.0	5.0	mg/L			09/04/18 13:14	1
Alkalinity	**307**		5.0	5.0	mg/L			09/04/18 13:14	1

Client Sample ID: RW-13(150-170)-083018

Lab Sample ID: 460-163741-9
Date Collected: 08/30/18 11:35
Matrix: Water
Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 00:23	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 00:23	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*09/11/18 00:23*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-13(150-170)-083018
Date Collected: 08/30/18 11:35
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/05/18 01:36	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/05/18 01:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/05/18 01:36	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 01:36	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/05/18 01:36	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/05/18 01:36	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/05/18 01:36	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/05/18 01:36	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/05/18 01:36	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 01:36	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/05/18 01:36	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/05/18 01:36	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/05/18 01:36	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/05/18 01:36	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/05/18 01:36	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/05/18 01:36	1
Acetone	5.0	U	5.0	5.0	ug/L			09/05/18 01:36	1
Benzene	0.43	U	1.0	0.43	ug/L			09/05/18 01:36	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/05/18 01:36	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/05/18 01:36	1
Carbon disulfide	**0.52**	**J**	1.0	0.16	ug/L			09/05/18 01:36	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/05/18 01:36	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/05/18 01:36	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/05/18 01:36	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/05/18 01:36	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/05/18 01:36	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/05/18 01:36	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/05/18 01:36	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/05/18 01:36	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/05/18 01:36	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/05/18 01:36	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/05/18 01:36	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/05/18 01:36	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/05/18 01:36	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/05/18 01:36	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/05/18 01:36	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/05/18 01:36	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/05/18 01:36	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/05/18 01:36	1
Styrene	0.42	U	1.0	0.42	ug/L			09/05/18 01:36	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/05/18 01:36	1
Toluene	0.38	U	1.0	0.38	ug/L			09/05/18 01:36	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/05/18 01:36	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/05/18 01:36	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/05/18 01:36	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/05/18 01:36	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/05/18 01:36	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/05/18 01:36	1

Client Sample ID: RW-13(150-170)-083018

Date Collected: 08/30/18 11:35
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-9

Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					09/05/18 01:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		70 - 130		09/05/18 01:36	1
4-Bromofluorobenzene	97		70 - 130		09/05/18 01:36	1
Dibromofluoromethane (Surr)	113		70 - 130		09/05/18 01:36	1
Toluene-d8 (Surr)	96		70 - 130		09/05/18 01:36	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/04/18 10:05	09/05/18 03:44	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	37		10 - 150	09/04/18 10:05	09/05/18 03:44	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 16:51	09/05/18 11:58	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 16:51	09/05/18 11:58	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 16:51	09/05/18 11:58	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		09/02/18 16:51	09/05/18 11:58	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		09/02/18 16:51	09/05/18 11:58	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 16:51	09/05/18 11:58	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		09/02/18 16:51	09/05/18 11:58	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 16:51	09/05/18 11:58	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		09/02/18 16:51	09/05/18 11:58	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 16:51	09/04/18 12:30	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 16:51	09/04/18 12:30	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 16:51	09/04/18 12:30	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 12:30	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 12:30	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 12:30	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 16:51	09/04/18 12:30	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 12:30	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 16:51	09/04/18 12:30	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 16:51	09/04/18 12:30	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 16:51	09/04/18 12:30	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 16:51	09/04/18 12:30	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 16:51	09/04/18 12:30	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 16:51	09/04/18 12:30	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 16:51	09/04/18 12:30	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 16:51	09/04/18 12:30	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 16:51	09/04/18 12:30	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 12:30	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 16:51	09/04/18 12:30	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		09/02/18 16:51	09/04/18 12:30	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 12:30	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 16:51	09/04/18 12:30	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 12:30	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-13(150-170)-083018
Date Collected: 08/30/18 11:35
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-9
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 16:51	09/04/18 12:30	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 16:51	09/04/18 12:30	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 16:51	09/04/18 12:30	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 16:51	09/04/18 12:30	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 16:51	09/04/18 12:30	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 12:30	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 12:30	1
2,4-Dinitrophenol	14	U *	20	14	ug/L		09/02/18 16:51	09/04/18 12:30	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 16:51	09/04/18 12:30	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 16:51	09/04/18 12:30	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 16:51	09/04/18 12:30	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 16:51	09/04/18 12:30	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 16:51	09/04/18 12:30	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 12:30	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 12:30	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 12:30	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 12:30	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 12:30	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 12:30	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 16:51	09/04/18 12:30	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 16:51	09/04/18 12:30	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 16:51	09/04/18 12:30	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 16:51	09/04/18 12:30	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/02/18 16:51	09/04/18 12:30	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 16:51	09/04/18 12:30	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 12:30	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 12:30	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 16:51	09/04/18 12:30	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 16:51	09/04/18 12:30	1
Caprolactam	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 12:30	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 16:51	09/04/18 12:30	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 12:30	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 12:30	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 12:30	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 12:30	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 12:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*09/02/18 16:51*	*09/04/18 12:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*114*		*30 - 130*	*09/02/18 16:51*	*09/04/18 12:30*	*1*
Phenol-d5 (Surr)	*41*		*15 - 110*	*09/02/18 16:51*	*09/04/18 12:30*	*1*
Terphenyl-d14 (Surr)	*110*		*30 - 130*	*09/02/18 16:51*	*09/04/18 12:30*	*1*
2,4,6-Tribromophenol (Surr)	*107*		*15 - 110*	*09/02/18 16:51*	*09/04/18 12:30*	*1*
2-Fluorophenol (Surr)	*62*		*15 - 110*	*09/02/18 16:51*	*09/04/18 12:30*	*1*
2-Fluorobiphenyl	*96*		*30 - 130*	*09/02/18 16:51*	*09/04/18 12:30*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-13(150-170)-083018
Date Collected: 08/30/18 11:35
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-9
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 08:37	1
PCB-1016	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 08:37	1
PCB-1221	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 08:37	1
PCB-1232	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 08:37	1
PCB-1242	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 08:37	1
PCB-1248	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 08:37	1
PCB-1254	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 08:37	1
PCB-1260	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 08:37	1
PCB-1262	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 08:37	1
PCB-1268	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 08:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*30 - 150*	*09/04/18 18:44*	*09/07/18 08:37*	*1*
Tetrachloro-m-xylene	*75*		*30 - 150*	*09/04/18 18:44*	*09/07/18 08:37*	*1*
DCB Decachlorobiphenyl	*81*		*30 - 150*	*09/04/18 18:44*	*09/07/18 08:37*	*1*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*09/04/18 18:44*	*09/07/18 08:37*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**12.2**		0.60	0.33	mg/L			09/04/18 20:58	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.71**	**D**	0.24	0.16	mg/L			09/05/18 11:25	2

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/14/18 00:26	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/08/18 03:00	09/14/18 00:26	2
Barium	**4.1**		4.0	1.1	ug/L		09/08/18 03:00	09/14/18 00:26	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/14/18 00:26	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/14/18 00:26	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:26	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:26	2
Copper	1.9	U	4.0	1.9	ug/L		09/08/18 03:00	09/14/18 00:26	2
Manganese	**7.1**	**J**	8.0	2.7	ug/L		09/08/18 03:00	09/14/18 00:26	2
Nickel	**6.0**		4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:26	2
Lead	**0.66**	**J**	1.2	0.37	ug/L		09/08/18 03:00	09/14/18 00:26	2
Antimony	**1.4**	**J**	2.0	0.62	ug/L		09/08/18 03:00	09/14/18 00:26	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/14/18 00:26	2
Vanadium	**1.2**	**J**	4.0	1.2	ug/L		09/08/18 03:00	09/14/18 00:26	2
Zinc	**13.7**	**J**	16.0	5.4	ug/L		09/08/18 03:00	09/14/18 00:26	2
Aluminum	**91.8**		40.0	15.0	ug/L		09/08/18 03:00	09/14/18 00:26	2
Sodium	**5180**		200	75.7	ug/L		09/08/18 03:00	09/14/18 00:26	2
Magnesium	**6530**		200	65.7	ug/L		09/08/18 03:00	09/14/18 05:47	2
Potassium	**1650**		200	64.9	ug/L		09/08/18 03:00	09/14/18 00:26	2
Calcium	**27000**		200	67.6	ug/L		09/08/18 03:00	09/14/18 00:26	2
Iron	**101**	**J**	120	45.7	ug/L		09/08/18 03:00	09/14/18 00:26	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/14/18 00:26	2

Client Sample ID: RW-13(150-170)-083018
Lab Sample ID: 460-163741-9
Date Collected: 08/30/18 11:35
Matrix: Water
Date Received: 08/31/18 19:30

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 12:26	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/14/18 11:10	09/14/18 12:26	2
Barium	**4.8**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 12:26	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 12:26	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 12:26	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:26	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:26	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 12:26	2
Manganese	**10.6**		8.0	2.7	ug/L		09/14/18 11:10	09/14/18 12:26	2
Nickel	**6.6**		4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:26	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 12:26	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 12:26	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 12:26	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/14/18 11:10	09/14/18 12:26	2
Zinc	**13.0**	**J**	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 12:26	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/14/18 11:10	09/14/18 12:26	2
Sodium	**5150**		200	75.7	ug/L		09/14/18 11:10	09/14/18 12:26	2
Magnesium	**7220**		200	65.7	ug/L		09/14/18 11:10	09/14/18 12:26	2
Potassium	**1480**		200	64.9	ug/L		09/14/18 11:10	09/14/18 12:26	2
Calcium	**25100**		200	67.6	ug/L		09/14/18 11:10	09/14/18 12:26	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 12:26	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 12:26	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:18	09/07/18 09:32	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 10:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:21	1
Bicarbonate Alkalinity as CaCO3	**84.2**		5.0	5.0	mg/L			09/04/18 13:31	1
Alkalinity	**102**		5.0	5.0	mg/L			09/04/18 13:31	1

Client Sample ID: RW-13(100-120)-083018
Lab Sample ID: 460-163741-10
Date Collected: 08/30/18 12:20
Matrix: Water
Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 00:47	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 00:47	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*09/11/18 00:47*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-13(100-120)-083018
Date Collected: 08/30/18 12:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/05/18 02:00	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/05/18 02:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/05/18 02:00	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 02:00	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/05/18 02:00	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/05/18 02:00	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/05/18 02:00	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/05/18 02:00	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/05/18 02:00	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 02:00	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/05/18 02:00	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/05/18 02:00	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/05/18 02:00	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/05/18 02:00	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/05/18 02:00	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/05/18 02:00	1
Acetone	**14**		5.0	5.0	ug/L			09/05/18 02:00	1
Benzene	0.43	U	1.0	0.43	ug/L			09/05/18 02:00	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/05/18 02:00	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/05/18 02:00	1
Carbon disulfide	**1.3**		1.0	0.16	ug/L			09/05/18 02:00	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/05/18 02:00	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/05/18 02:00	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/05/18 02:00	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/05/18 02:00	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/05/18 02:00	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/05/18 02:00	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/05/18 02:00	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/05/18 02:00	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/05/18 02:00	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/05/18 02:00	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/05/18 02:00	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/05/18 02:00	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/05/18 02:00	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/05/18 02:00	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/05/18 02:00	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/05/18 02:00	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/05/18 02:00	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/05/18 02:00	1
Styrene	0.42	U	1.0	0.42	ug/L			09/05/18 02:00	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/05/18 02:00	1
Toluene	**0.41**	**J**	1.0	0.38	ug/L			09/05/18 02:00	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/05/18 02:00	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/05/18 02:00	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/05/18 02:00	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/05/18 02:00	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/05/18 02:00	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/05/18 02:00	1

Client Sample ID: RW-13(100-120)-083018

Date Collected: 08/30/18 12:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-10

Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
1-Pentanol, 2-ethyl-4-methyl-	7.0	J N	ug/L		11.06	106-67-2		09/05/18 02:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		70 - 130		09/05/18 02:00	1
4-Bromofluorobenzene	96		70 - 130		09/05/18 02:00	1
Dibromofluoromethane (Surr)	110		70 - 130		09/05/18 02:00	1
Toluene-d8 (Surr)	98		70 - 130		09/05/18 02:00	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/04/18 10:05	09/05/18 04:02	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	35		10 - 150	09/04/18 10:05	09/05/18 04:02	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 16:51	09/05/18 12:20	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 16:51	09/05/18 12:20	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 16:51	09/05/18 12:20	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		09/02/18 16:51	09/05/18 12:20	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		09/02/18 16:51	09/05/18 12:20	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 16:51	09/05/18 12:20	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		09/02/18 16:51	09/05/18 12:20	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 16:51	09/05/18 12:20	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		09/02/18 16:51	09/05/18 12:20	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**2.8**	**J**	10	0.29	ug/L		09/02/18 16:51	09/04/18 12:51	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 16:51	09/04/18 12:51	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 16:51	09/04/18 12:51	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 12:51	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 12:51	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 12:51	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 16:51	09/04/18 12:51	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 12:51	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 16:51	09/04/18 12:51	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 16:51	09/04/18 12:51	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 16:51	09/04/18 12:51	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 16:51	09/04/18 12:51	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 16:51	09/04/18 12:51	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 16:51	09/04/18 12:51	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 16:51	09/04/18 12:51	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 16:51	09/04/18 12:51	1
Isophorone	**0.80**	**J**	10	0.80	ug/L		09/02/18 16:51	09/04/18 12:51	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 12:51	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 16:51	09/04/18 12:51	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		09/02/18 16:51	09/04/18 12:51	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 12:51	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 16:51	09/04/18 12:51	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 12:51	1

Client Sample ID: RW-13(100-120)-083018
Date Collected: 08/30/18 12:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-10
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 16:51	09/04/18 12:51	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 16:51	09/04/18 12:51	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 16:51	09/04/18 12:51	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 16:51	09/04/18 12:51	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 16:51	09/04/18 12:51	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 12:51	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 12:51	1
2,4-Dinitrophenol	14	U *	20	14	ug/L		09/02/18 16:51	09/04/18 12:51	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 16:51	09/04/18 12:51	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 16:51	09/04/18 12:51	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 16:51	09/04/18 12:51	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 16:51	09/04/18 12:51	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 16:51	09/04/18 12:51	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 12:51	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 12:51	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 12:51	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 12:51	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 12:51	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 12:51	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 16:51	09/04/18 12:51	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 16:51	09/04/18 12:51	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 16:51	09/04/18 12:51	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 16:51	09/04/18 12:51	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/02/18 16:51	09/04/18 12:51	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 16:51	09/04/18 12:51	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 12:51	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 12:51	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 16:51	09/04/18 12:51	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 16:51	09/04/18 12:51	1
Caprolactam	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 12:51	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 16:51	09/04/18 12:51	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 12:51	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 12:51	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 12:51	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 12:51	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 12:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*6.4*	*J*	*ug/L*		*4.16*		*09/02/18 16:51*	*09/04/18 12:51*	*1*
Ethanol, 2-(2-butoxyethoxy)-	*150*	*J N*	*ug/L*		*5.26*	*112-34-5*	*09/02/18 16:51*	*09/04/18 12:51*	*1*
Diethyltoluamide	*6.8*	*J N*	*ug/L*		*7.39*	*134-62-3*	*09/02/18 16:51*	*09/04/18 12:51*	*1*
.gamma. Dodecalactone	*8.0*	*J N*	*ug/L*		*7.86*	*2305-05-7*	*09/02/18 16:51*	*09/04/18 12:51*	*1*
Unknown	*7.0*	*J*	*ug/L*		*7.99*		*09/02/18 16:51*	*09/04/18 12:51*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,9-diene-2,8-dione	*20*	*J N*	*ug/L*		*8.82*	*82304-66-3*	*09/02/18 16:51*	*09/04/18 12:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*111*		*30 - 130*	*09/02/18 16:51*	*09/04/18 12:51*	*1*
Phenol-d5 (Surr)	*38*		*15 - 110*	*09/02/18 16:51*	*09/04/18 12:51*	*1*
Terphenyl-d14 (Surr)	*112*		*30 - 130*	*09/02/18 16:51*	*09/04/18 12:51*	*1*

Client Sample ID: RW-13(100-120)-083018
Date Collected: 08/30/18 12:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-10
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*114*	*X*	*15 - 110*	*09/02/18 16:51*	*09/04/18 12:51*	*1*
2-Fluorophenol (Surr)	*60*		*15 - 110*	*09/02/18 16:51*	*09/04/18 12:51*	*1*
2-Fluorobiphenyl	*92*		*30 - 130*	*09/02/18 16:51*	*09/04/18 12:51*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:00	1
PCB-1016	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:00	1
PCB-1221	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:00	1
PCB-1232	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:00	1
PCB-1242	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:00	1
PCB-1248	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:00	1
PCB-1254	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 09:00	1
PCB-1260	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 09:00	1
PCB-1262	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 09:00	1
PCB-1268	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 09:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*30 - 150*	*09/04/18 18:44*	*09/07/18 09:00*	*1*
Tetrachloro-m-xylene	*79*		*30 - 150*	*09/04/18 18:44*	*09/07/18 09:00*	*1*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*09/04/18 18:44*	*09/07/18 09:00*	*1*
DCB Decachlorobiphenyl	*85*		*30 - 150*	*09/04/18 18:44*	*09/07/18 09:00*	*1*

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.0**	**D**	0.96	0.62	mg/L			09/05/18 11:52	8
Sulfate	**74.1**	**D**	4.80	2.66	mg/L			09/05/18 11:52	8

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/14/18 00:46	2
Arsenic	**2.7**		2.0	0.77	ug/L		09/08/18 03:00	09/14/18 00:46	2
Barium	**9.0**		4.0	1.1	ug/L		09/08/18 03:00	09/14/18 00:46	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/14/18 00:46	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/14/18 00:46	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:46	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:46	2
Copper	**2.9**	**J**	4.0	1.9	ug/L		09/08/18 03:00	09/14/18 00:46	2
Manganese	**11.6**		8.0	2.7	ug/L		09/08/18 03:00	09/14/18 00:46	2
Nickel	**15.0**		4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:46	2
Lead	**1.1**	**J**	1.2	0.37	ug/L		09/08/18 03:00	09/14/18 00:46	2
Antimony	**1.8**	**J**	2.0	0.62	ug/L		09/08/18 03:00	09/14/18 00:46	2
Selenium	**4.5**	**J**	10.0	0.69	ug/L		09/08/18 03:00	09/14/18 00:46	2
Vanadium	**15.7**		4.0	1.2	ug/L		09/08/18 03:00	09/14/18 00:46	2
Zinc	**26.1**		16.0	5.4	ug/L		09/08/18 03:00	09/14/18 00:46	2
Aluminum	**2500**		40.0	15.0	ug/L		09/08/18 03:00	09/14/18 00:46	2
Sodium	**95500**		200	75.7	ug/L		09/08/18 03:00	09/14/18 00:46	2
Magnesium	**154**	**J**	200	65.7	ug/L		09/08/18 03:00	09/14/18 14:51	2
Potassium	**81500**		200	64.9	ug/L		09/08/18 03:00	09/14/18 00:46	2
Calcium	**16400**		200	67.6	ug/L		09/08/18 03:00	09/14/18 00:46	2

Client Sample ID: RW-13(100-120)-083018

Lab Sample ID: 460-163741-10

Date Collected: 08/30/18 12:20

Matrix: Water

Date Received: 08/31/18 19:30

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3200**		120	45.7	ug/L		09/08/18 03:00	09/14/18 00:46	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/14/18 00:46	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 12:29	2
Arsenic	**3.6**		2.0	0.77	ug/L		09/14/18 11:10	09/14/18 12:29	2
Barium	**11.5**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 12:29	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 12:29	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 12:29	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:29	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:29	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 12:29	2
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 11:10	09/14/18 12:29	2
Nickel	**3.3**	**J**	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:29	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 12:29	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 12:29	2
Selenium	**6.7**	**J**	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 12:29	2
Vanadium	**14.5**		4.0	1.2	ug/L		09/14/18 11:10	09/14/18 12:29	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 12:29	2
Aluminum	**2600**		40.0	15.0	ug/L		09/14/18 11:10	09/14/18 12:29	2
Sodium	**104000**		200	75.7	ug/L		09/14/18 11:10	09/14/18 12:29	2
Magnesium	65.7	U	200	65.7	ug/L		09/14/18 11:10	09/14/18 12:29	2
Potassium	**78400**		200	64.9	ug/L		09/14/18 11:10	09/14/18 12:29	2
Calcium	**15400**		200	67.6	ug/L		09/14/18 11:10	09/14/18 12:29	2
Iron	**61.3**	**J**	120	45.7	ug/L		09/14/18 11:10	09/14/18 12:29	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 12:29	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:18	09/07/18 09:34	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 13:22	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			09/04/18 13:42	1
Alkalinity	**250**		5.0	5.0	mg/L			09/04/18 13:42	1

Client Sample ID: RW-3DS(155-160)-083018

Lab Sample ID: 460-163741-11

Date Collected: 08/30/18 13:00

Matrix: Water

Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 01:10	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 01:10	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 01:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		70 - 130		09/11/18 01:10	1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/05/18 02:23	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/05/18 02:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/05/18 02:23	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 02:23	1
1,1-Dichloroethane	**2.7**		1.0	0.26	ug/L			09/05/18 02:23	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/05/18 02:23	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/05/18 02:23	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/05/18 02:23	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/05/18 02:23	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 02:23	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/05/18 02:23	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/05/18 02:23	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/05/18 02:23	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/05/18 02:23	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/05/18 02:23	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/05/18 02:23	1
Acetone	5.0	U	5.0	5.0	ug/L			09/05/18 02:23	1
Benzene	0.43	U	1.0	0.43	ug/L			09/05/18 02:23	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/05/18 02:23	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/05/18 02:23	1
Carbon disulfide	**17**		1.0	0.16	ug/L			09/05/18 02:23	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/05/18 02:23	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/05/18 02:23	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/05/18 02:23	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/05/18 02:23	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/05/18 02:23	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/05/18 02:23	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/05/18 02:23	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/05/18 02:23	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/05/18 02:23	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/05/18 02:23	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/05/18 02:23	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/05/18 02:23	1
Ethylbenzene	**0.44**	**J**	1.0	0.30	ug/L			09/05/18 02:23	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/05/18 02:23	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/05/18 02:23	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/05/18 02:23	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/05/18 02:23	1
Methylene Chloride	**0.33**	**J**	1.0	0.32	ug/L			09/05/18 02:23	1
Styrene	0.42	U	1.0	0.42	ug/L			09/05/18 02:23	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/05/18 02:23	1
Toluene	**0.46**	**J**	1.0	0.38	ug/L			09/05/18 02:23	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/05/18 02:23	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/05/18 02:23	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/05/18 02:23	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/05/18 02:23	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/05/18 02:23	1
Xylenes, Total	**0.67**	**J**	2.0	0.65	ug/L			09/05/18 02:23	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					09/05/18 02:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*		*09/05/18 02:23*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*09/05/18 02:23*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*09/05/18 02:23*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/05/18 02:23*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**12**		0.20	0.016	ug/L		09/04/18 10:05	09/05/18 04:20	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	*36*		*10 - 150*	*09/04/18 10:05*	*09/05/18 04:20*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 16:51	09/05/18 12:41	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 16:51	09/05/18 12:41	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 16:51	09/05/18 12:41	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		09/02/18 16:51	09/05/18 12:41	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		09/02/18 16:51	09/05/18 12:41	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 16:51	09/05/18 12:41	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		09/02/18 16:51	09/05/18 12:41	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 16:51	09/05/18 12:41	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		09/02/18 16:51	09/05/18 12:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**4.4**	**J**	10	0.29	ug/L		09/02/18 16:51	09/04/18 13:12	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 16:51	09/04/18 13:12	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 16:51	09/04/18 13:12	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 13:12	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 13:12	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 13:12	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 16:51	09/04/18 13:12	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 13:12	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 16:51	09/04/18 13:12	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 16:51	09/04/18 13:12	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 16:51	09/04/18 13:12	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 16:51	09/04/18 13:12	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 16:51	09/04/18 13:12	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 16:51	09/04/18 13:12	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 16:51	09/04/18 13:12	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 16:51	09/04/18 13:12	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 16:51	09/04/18 13:12	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 13:12	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 16:51	09/04/18 13:12	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		09/02/18 16:51	09/04/18 13:12	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 13:12	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 16:51	09/04/18 13:12	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 13:12	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 16:51	09/04/18 13:12	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 16:51	09/04/18 13:12	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 16:51	09/04/18 13:12	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 16:51	09/04/18 13:12	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 16:51	09/04/18 13:12	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 13:12	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 13:12	1

Client Sample ID: RW-3DS(155-160)-083018
Date Collected: 08/30/18 13:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-11
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	14	U *	20	14	ug/L		09/02/18 16:51	09/04/18 13:12	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 16:51	09/04/18 13:12	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 16:51	09/04/18 13:12	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 16:51	09/04/18 13:12	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 16:51	09/04/18 13:12	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 16:51	09/04/18 13:12	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 13:12	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 13:12	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 13:12	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 13:12	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 13:12	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 13:12	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 16:51	09/04/18 13:12	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 16:51	09/04/18 13:12	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 16:51	09/04/18 13:12	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 16:51	09/04/18 13:12	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/02/18 16:51	09/04/18 13:12	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 16:51	09/04/18 13:12	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 13:12	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 13:12	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 16:51	09/04/18 13:12	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 16:51	09/04/18 13:12	1
Caprolactam	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 13:12	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 16:51	09/04/18 13:12	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 13:12	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 13:12	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 13:12	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 13:12	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 13:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*09/02/18 16:51*	*09/04/18 13:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*113*		*30 - 130*	*09/02/18 16:51*	*09/04/18 13:12*	*1*
Phenol-d5 (Surr)	*38*		*15 - 110*	*09/02/18 16:51*	*09/04/18 13:12*	*1*
Terphenyl-d14 (Surr)	*112*		*30 - 130*	*09/02/18 16:51*	*09/04/18 13:12*	*1*
2,4,6-Tribromophenol (Surr)	*113*	*X*	*15 - 110*	*09/02/18 16:51*	*09/04/18 13:12*	*1*
2-Fluorophenol (Surr)	*58*		*15 - 110*	*09/02/18 16:51*	*09/04/18 13:12*	*1*
2-Fluorobiphenyl	*91*		*30 - 130*	*09/02/18 16:51*	*09/04/18 13:12*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:24	1
PCB-1016	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:24	1
PCB-1221	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:24	1
PCB-1232	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:24	1
PCB-1242	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:24	1
PCB-1248	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:24	1
PCB-1254	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 09:24	1

Client Sample ID: RW-3DS(155-160)-083018

Date Collected: 08/30/18 13:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-11

Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 09:24	1
PCB-1262	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 09:24	1
PCB-1268	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 09:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*30 - 150*	*09/04/18 18:44*	*09/07/18 09:24*	*1*
Tetrachloro-m-xylene	*78*		*30 - 150*	*09/04/18 18:44*	*09/07/18 09:24*	*1*
DCB Decachlorobiphenyl	*83*		*30 - 150*	*09/04/18 18:44*	*09/07/18 09:24*	*1*
DCB Decachlorobiphenyl	*83*		*30 - 150*	*09/04/18 18:44*	*09/07/18 09:24*	*1*

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31.8**	**D**	3.12	2.03	mg/L			09/05/18 11:38	26
Sulfate	**361**	**D**	15.6	8.63	mg/L			09/05/18 11:38	26

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/14/18 00:56	2
Arsenic	**12.4**		2.0	0.77	ug/L		09/08/18 03:00	09/14/18 00:56	2
Barium	**11.3**		4.0	1.1	ug/L		09/08/18 03:00	09/14/18 00:56	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/14/18 00:56	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/14/18 00:56	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:56	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:56	2
Copper	1.9	U	4.0	1.9	ug/L		09/08/18 03:00	09/14/18 00:56	2
Manganese	2.7	U	8.0	2.7	ug/L		09/08/18 03:00	09/14/18 00:56	2
Nickel	**3.0**	**J**	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 00:56	2
Lead	0.37	U	1.2	0.37	ug/L		09/08/18 03:00	09/14/18 00:56	2
Antimony	**2.3**		2.0	0.62	ug/L		09/08/18 03:00	09/14/18 00:56	2
Selenium	**2.0**	**J**	10.0	0.69	ug/L		09/08/18 03:00	09/14/18 00:56	2
Vanadium	**6.4**		4.0	1.2	ug/L		09/08/18 03:00	09/14/18 00:56	2
Zinc	5.4	U	16.0	5.4	ug/L		09/08/18 03:00	09/14/18 00:56	2
Aluminum	**44.3**		40.0	15.0	ug/L		09/08/18 03:00	09/14/18 00:56	2
Sodium	**177000**		200	75.7	ug/L		09/08/18 03:00	09/14/18 00:56	2
Magnesium	65.7	U	200	65.7	ug/L		09/08/18 03:00	09/14/18 14:56	2
Potassium	**32800**		200	64.9	ug/L		09/08/18 03:00	09/14/18 00:56	2
Calcium	**43100**		200	67.6	ug/L		09/08/18 03:00	09/14/18 00:56	2
Iron	45.7	U	120	45.7	ug/L		09/08/18 03:00	09/14/18 00:56	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/14/18 00:56	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 12:31	2
Arsenic	**15.7**		2.0	0.77	ug/L		09/14/18 11:10	09/14/18 12:31	2
Barium	**11.3**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 12:31	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 12:31	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 12:31	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:31	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:31	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 12:31	2

Client Sample ID: RW-3DS(155-160)-083018

Lab Sample ID: 460-163741-11
Date Collected: 08/30/18 13:00
Matrix: Water
Date Received: 08/31/18 19:30

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 11:10	09/14/18 12:31	2
Nickel	**2.1**	**J**	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:31	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 12:31	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 12:31	2
Selenium	**2.9**	**J**	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 12:31	2
Vanadium	**5.7**		4.0	1.2	ug/L		09/14/18 11:10	09/14/18 12:31	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 12:31	2
Aluminum	**42.0**		40.0	15.0	ug/L		09/14/18 11:10	09/14/18 12:31	2
Sodium	**194000**		200	75.7	ug/L		09/14/18 11:10	09/14/18 12:31	2
Magnesium	65.7	U	200	65.7	ug/L		09/14/18 11:10	09/14/18 12:31	2
Potassium	**28400**		200	64.9	ug/L		09/14/18 11:10	09/14/18 12:31	2
Calcium	**40000**		200	67.6	ug/L		09/14/18 11:10	09/14/18 12:31	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 12:31	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 12:31	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:41	09/07/18 10:09	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 10:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 11:18	09/10/18 13:28	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			09/04/18 13:51	1
Alkalinity	**98.7**		5.0	5.0	mg/L			09/04/18 13:51	1

Client Sample ID: RW-3DD(175-180)-083018

Lab Sample ID: 460-163741-12
Date Collected: 08/30/18 12:30
Matrix: Water
Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 01:33	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 01:33	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*09/11/18 01:33*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/05/18 02:47	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/05/18 02:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/05/18 02:47	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 02:47	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/05/18 02:47	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/05/18 02:47	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/05/18 02:47	1

Client Sample ID: RW-3DD(175-180)-083018
Date Collected: 08/30/18 12:30
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/05/18 02:47	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/05/18 02:47	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 02:47	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/05/18 02:47	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/05/18 02:47	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/05/18 02:47	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/05/18 02:47	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/05/18 02:47	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/05/18 02:47	1
Acetone	5.0	U	5.0	5.0	ug/L			09/05/18 02:47	1
Benzene	0.43	U	1.0	0.43	ug/L			09/05/18 02:47	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/05/18 02:47	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/05/18 02:47	1
Carbon disulfide	**9.2**		1.0	0.16	ug/L			09/05/18 02:47	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/05/18 02:47	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/05/18 02:47	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/05/18 02:47	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/05/18 02:47	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/05/18 02:47	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/05/18 02:47	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/05/18 02:47	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/05/18 02:47	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/05/18 02:47	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/05/18 02:47	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/05/18 02:47	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/05/18 02:47	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/05/18 02:47	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/05/18 02:47	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/05/18 02:47	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/05/18 02:47	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/05/18 02:47	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/05/18 02:47	1
Styrene	0.42	U	1.0	0.42	ug/L			09/05/18 02:47	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/05/18 02:47	1
Toluene	0.38	U	1.0	0.38	ug/L			09/05/18 02:47	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/05/18 02:47	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/05/18 02:47	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/05/18 02:47	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/05/18 02:47	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/05/18 02:47	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/05/18 02:47	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethanethiol	*9.5*	*J N*	*ug/L*		*2.67*	*75-08-1*		*09/05/18 02:47*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*		*09/05/18 02:47*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*09/05/18 02:47*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*09/05/18 02:47*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/05/18 02:47*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	12		0.20	0.016	ug/L		09/04/18 10:05	09/05/18 04:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*10 - 150*	*09/04/18 10:05*	*09/05/18 04:38*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 16:51	09/05/18 13:02	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 16:51	09/05/18 13:02	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 16:51	09/05/18 13:02	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		09/02/18 16:51	09/05/18 13:02	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		09/02/18 16:51	09/05/18 13:02	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 16:51	09/05/18 13:02	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		09/02/18 16:51	09/05/18 13:02	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 16:51	09/05/18 13:02	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		09/02/18 16:51	09/05/18 13:02	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 16:51	09/04/18 13:33	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 16:51	09/04/18 13:33	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 16:51	09/04/18 13:33	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 13:33	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 13:33	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 13:33	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 16:51	09/04/18 13:33	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 13:33	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 16:51	09/04/18 13:33	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 16:51	09/04/18 13:33	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 16:51	09/04/18 13:33	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 16:51	09/04/18 13:33	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 16:51	09/04/18 13:33	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 16:51	09/04/18 13:33	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 16:51	09/04/18 13:33	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 16:51	09/04/18 13:33	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 16:51	09/04/18 13:33	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 13:33	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 16:51	09/04/18 13:33	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		09/02/18 16:51	09/04/18 13:33	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 13:33	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 16:51	09/04/18 13:33	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 13:33	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 16:51	09/04/18 13:33	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 16:51	09/04/18 13:33	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 16:51	09/04/18 13:33	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 16:51	09/04/18 13:33	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 16:51	09/04/18 13:33	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 13:33	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 13:33	1
2,4-Dinitrophenol	14	U *	20	14	ug/L		09/02/18 16:51	09/04/18 13:33	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 16:51	09/04/18 13:33	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 16:51	09/04/18 13:33	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 16:51	09/04/18 13:33	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 16:51	09/04/18 13:33	1

Client Sample ID: RW-3DD(175-180)-083018
Date Collected: 08/30/18 12:30
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-12
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 16:51	09/04/18 13:33	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 13:33	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 13:33	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 13:33	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 13:33	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 13:33	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 13:33	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 16:51	09/04/18 13:33	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 16:51	09/04/18 13:33	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 16:51	09/04/18 13:33	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 16:51	09/04/18 13:33	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/02/18 16:51	09/04/18 13:33	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 16:51	09/04/18 13:33	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 13:33	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 13:33	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 16:51	09/04/18 13:33	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 16:51	09/04/18 13:33	1
Caprolactam	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 13:33	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 16:51	09/04/18 13:33	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 13:33	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 13:33	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 13:33	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 13:33	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 13:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzenesulfonamide, N-butyl-	*6.5*	*J N*	*ug/L*		*8.33*	*3622-84-2*	*09/02/18 16:51*	*09/04/18 13:33*	*1*
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca -6,9-diene-2,8-dione	*12*	*J N*	*ug/L*		*8.82*	*82304-66-3*	*09/02/18 16:51*	*09/04/18 13:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*113*		*30 - 130*	*09/02/18 16:51*	*09/04/18 13:33*	*1*
Phenol-d5 (Surr)	*42*		*15 - 110*	*09/02/18 16:51*	*09/04/18 13:33*	*1*
Terphenyl-d14 (Surr)	*111*		*30 - 130*	*09/02/18 16:51*	*09/04/18 13:33*	*1*
2,4,6-Tribromophenol (Surr)	*110*		*15 - 110*	*09/02/18 16:51*	*09/04/18 13:33*	*1*
2-Fluorophenol (Surr)	*64*		*15 - 110*	*09/02/18 16:51*	*09/04/18 13:33*	*1*
2-Fluorobiphenyl	*92*		*30 - 130*	*09/02/18 16:51*	*09/04/18 13:33*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:47	1
PCB-1016	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:47	1
PCB-1221	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:47	1
PCB-1232	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:47	1
PCB-1242	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:47	1
PCB-1248	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 09:47	1
PCB-1254	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 09:47	1
PCB-1260	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 09:47	1
PCB-1262	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 09:47	1
PCB-1268	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 09:47	1

Client Sample ID: RW-3DD(175-180)-083018
Date Collected: 08/30/18 12:30
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-12
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*30 - 150*	*09/04/18 18:44*	*09/07/18 09:47*	*1*
Tetrachloro-m-xylene	*86*		*30 - 150*	*09/04/18 18:44*	*09/07/18 09:47*	*1*
DCB Decachlorobiphenyl	*88*		*30 - 150*	*09/04/18 18:44*	*09/07/18 09:47*	*1*
DCB Decachlorobiphenyl	*91*		*30 - 150*	*09/04/18 18:44*	*09/07/18 09:47*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**29.5**		0.60	0.33	mg/L			09/04/18 23:21	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.3**	**D**	0.48	0.31	mg/L			09/05/18 13:13	4

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/14/18 01:00	2
Arsenic	**18.8**		2.0	0.77	ug/L		09/08/18 03:00	09/14/18 01:00	2
Barium	**6.9**		4.0	1.1	ug/L		09/08/18 03:00	09/14/18 01:00	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/14/18 01:00	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/14/18 01:00	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:00	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:00	2
Copper	1.9	U	4.0	1.9	ug/L		09/08/18 03:00	09/14/18 01:00	2
Manganese	**4.8**	**J**	8.0	2.7	ug/L		09/08/18 03:00	09/14/18 01:00	2
Nickel	**4.0**		4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:00	2
Lead	0.37	U	1.2	0.37	ug/L		09/08/18 03:00	09/14/18 01:00	2
Antimony	**2.2**		2.0	0.62	ug/L		09/08/18 03:00	09/14/18 01:00	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/14/18 01:00	2
Vanadium	**3.8**	**J**	4.0	1.2	ug/L		09/08/18 03:00	09/14/18 01:00	2
Zinc	**10.7**	**J**	16.0	5.4	ug/L		09/08/18 03:00	09/14/18 01:00	2
Aluminum	**132**		40.0	15.0	ug/L		09/08/18 03:00	09/14/18 01:00	2
Sodium	**34100**		200	75.7	ug/L		09/08/18 03:00	09/14/18 01:00	2
Magnesium	**906**		200	65.7	ug/L		09/08/18 03:00	09/14/18 14:59	2
Potassium	**13400**		200	64.9	ug/L		09/08/18 03:00	09/14/18 01:00	2
Calcium	**20200**		200	67.6	ug/L		09/08/18 03:00	09/14/18 01:00	2
Iron	**161**		120	45.7	ug/L		09/08/18 03:00	09/14/18 01:00	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/14/18 01:00	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 12:34	2
Arsenic	**17.1**		2.0	0.77	ug/L		09/14/18 11:10	09/14/18 12:34	2
Barium	**4.1**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 12:34	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 12:34	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 12:34	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:34	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:34	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 12:34	2
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 11:10	09/14/18 12:34	2
Nickel	**2.2**	**J**	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:34	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 12:34	2

Client Sample ID: RW-3DD(175-180)-083018

Lab Sample ID: 460-163741-12

Date Collected: 08/30/18 12:30

Matrix: Water

Date Received: 08/31/18 19:30

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 12:34	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 12:34	2
Vanadium	**2.6**	**J**	4.0	1.2	ug/L		09/14/18 11:10	09/14/18 12:34	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 12:34	2
Aluminum	**40.2**		40.0	15.0	ug/L		09/14/18 11:10	09/14/18 12:34	2
Sodium	**38400**		200	75.7	ug/L		09/14/18 11:10	09/14/18 12:34	2
Magnesium	**1270**		200	65.7	ug/L		09/14/18 11:10	09/14/18 12:34	2
Potassium	**16600**		200	64.9	ug/L		09/14/18 11:10	09/14/18 12:34	2
Calcium	**7930**		200	67.6	ug/L		09/14/18 11:10	09/14/18 12:34	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 12:34	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 12:34	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:41	09/07/18 10:11	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 10:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 11:18	09/10/18 13:30	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			09/04/18 14:00	1
Alkalinity	**77.2**		5.0	5.0	mg/L			09/04/18 14:00	1

Client Sample ID: RW-3(77-87)-083018

Lab Sample ID: 460-163741-13

Date Collected: 08/30/18 13:35

Matrix: Water

Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 01:56	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 01:56	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*70 - 130*		*09/11/18 01:56*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/05/18 03:11	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/05/18 03:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/05/18 03:11	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 03:11	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/05/18 03:11	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/05/18 03:11	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/05/18 03:11	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/05/18 03:11	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/05/18 03:11	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 03:11	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-3(77-87)-083018
Date Collected: 08/30/18 13:35
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-13
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/05/18 03:11	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/05/18 03:11	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/05/18 03:11	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/05/18 03:11	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/05/18 03:11	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/05/18 03:11	1
Acetone	5.0	U	5.0	5.0	ug/L			09/05/18 03:11	1
Benzene	0.43	U	1.0	0.43	ug/L			09/05/18 03:11	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/05/18 03:11	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/05/18 03:11	1
Carbon disulfide	**1.1**		1.0	0.16	ug/L			09/05/18 03:11	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/05/18 03:11	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/05/18 03:11	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/05/18 03:11	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/05/18 03:11	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/05/18 03:11	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/05/18 03:11	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/05/18 03:11	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/05/18 03:11	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/05/18 03:11	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/05/18 03:11	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/05/18 03:11	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/05/18 03:11	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/05/18 03:11	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/05/18 03:11	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/05/18 03:11	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/05/18 03:11	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/05/18 03:11	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/05/18 03:11	1
Styrene	0.42	U	1.0	0.42	ug/L			09/05/18 03:11	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/05/18 03:11	1
Toluene	0.38	U	1.0	0.38	ug/L			09/05/18 03:11	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/05/18 03:11	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/05/18 03:11	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/05/18 03:11	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/05/18 03:11	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/05/18 03:11	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/05/18 03:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/05/18 03:11*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*09/05/18 03:11*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*09/05/18 03:11*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*09/05/18 03:11*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/05/18 03:11*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-3(77-87)-083018
Date Collected: 08/30/18 13:35
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-13
Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	14		0.20	0.016	ug/L		09/04/18 10:05	09/05/18 04:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*10 - 150*	*09/04/18 10:05*	*09/05/18 04:56*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 16:51	09/05/18 13:24	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 16:51	09/05/18 13:24	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 16:51	09/05/18 13:24	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		09/02/18 16:51	09/05/18 13:24	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		09/02/18 16:51	09/05/18 13:24	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 16:51	09/05/18 13:24	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		09/02/18 16:51	09/05/18 13:24	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 16:51	09/05/18 13:24	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		09/02/18 16:51	09/05/18 13:24	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 16:51	09/04/18 13:54	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 16:51	09/04/18 13:54	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 16:51	09/04/18 13:54	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 13:54	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 13:54	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 13:54	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 16:51	09/04/18 13:54	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 13:54	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 16:51	09/04/18 13:54	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 16:51	09/04/18 13:54	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 16:51	09/04/18 13:54	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 16:51	09/04/18 13:54	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 16:51	09/04/18 13:54	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 16:51	09/04/18 13:54	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 16:51	09/04/18 13:54	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 16:51	09/04/18 13:54	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 16:51	09/04/18 13:54	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 13:54	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 16:51	09/04/18 13:54	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		09/02/18 16:51	09/04/18 13:54	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 13:54	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 16:51	09/04/18 13:54	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 13:54	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 16:51	09/04/18 13:54	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 16:51	09/04/18 13:54	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 16:51	09/04/18 13:54	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 16:51	09/04/18 13:54	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 16:51	09/04/18 13:54	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 13:54	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 13:54	1
2,4-Dinitrophenol	14	U *	20	14	ug/L		09/02/18 16:51	09/04/18 13:54	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 16:51	09/04/18 13:54	1

Client Sample ID: RW-3(77-87)-083018
Date Collected: 08/30/18 13:35
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-13
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 16:51	09/04/18 13:54	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 16:51	09/04/18 13:54	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 16:51	09/04/18 13:54	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 16:51	09/04/18 13:54	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 13:54	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 13:54	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 13:54	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 13:54	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 13:54	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 13:54	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 16:51	09/04/18 13:54	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 16:51	09/04/18 13:54	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 16:51	09/04/18 13:54	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 16:51	09/04/18 13:54	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/02/18 16:51	09/04/18 13:54	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 16:51	09/04/18 13:54	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 13:54	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 13:54	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 16:51	09/04/18 13:54	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 16:51	09/04/18 13:54	1
Caprolactam	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 13:54	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 16:51	09/04/18 13:54	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 13:54	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 13:54	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 13:54	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 13:54	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 13:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*09/02/18 16:51*	*09/04/18 13:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*117*		*30 - 130*	*09/02/18 16:51*	*09/04/18 13:54*	*1*
Phenol-d5 (Surr)	*45*		*15 - 110*	*09/02/18 16:51*	*09/04/18 13:54*	*1*
Terphenyl-d14 (Surr)	*113*		*30 - 130*	*09/02/18 16:51*	*09/04/18 13:54*	*1*
2,4,6-Tribromophenol (Surr)	*106*		*15 - 110*	*09/02/18 16:51*	*09/04/18 13:54*	*1*
2-Fluorophenol (Surr)	*65*		*15 - 110*	*09/02/18 16:51*	*09/04/18 13:54*	*1*
2-Fluorobiphenyl	*95*		*30 - 130*	*09/02/18 16:51*	*09/04/18 13:54*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:11	1
PCB-1016	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:11	1
PCB-1221	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:11	1
PCB-1232	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:11	1
PCB-1242	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:11	1
PCB-1248	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:11	1
PCB-1254	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 10:11	1
PCB-1260	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 10:11	1
PCB-1262	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 10:11	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-3(77-87)-083018
Date Collected: 08/30/18 13:35
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-13
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 10:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*30 - 150*	*09/04/18 18:44*	*09/07/18 10:11*	*1*
Tetrachloro-m-xylene	*75*		*30 - 150*	*09/04/18 18:44*	*09/07/18 10:11*	*1*
DCB Decachlorobiphenyl	*83*		*30 - 150*	*09/04/18 18:44*	*09/07/18 10:11*	*1*
DCB Decachlorobiphenyl	*80*		*30 - 150*	*09/04/18 18:44*	*09/07/18 10:11*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**5.28**		0.60	0.33	mg/L			09/04/18 23:34	1

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.40**	**D**	0.36	0.23	mg/L			09/05/18 13:27	3

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/14/18 01:03	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/08/18 03:00	09/14/18 01:03	2
Barium	**55.3**		4.0	1.1	ug/L		09/08/18 03:00	09/14/18 01:03	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/14/18 01:03	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/14/18 01:03	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:03	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:03	2
Copper	**2.2**	**J**	4.0	1.9	ug/L		09/08/18 03:00	09/14/18 01:03	2
Manganese	**439**		8.0	2.7	ug/L		09/08/18 03:00	09/14/18 01:03	2
Nickel	**1.4**	**J**	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:03	2
Lead	0.37	U	1.2	0.37	ug/L		09/08/18 03:00	09/14/18 01:03	2
Antimony	**1.7**	**J**	2.0	0.62	ug/L		09/08/18 03:00	09/14/18 01:03	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/14/18 01:03	2
Vanadium	**1.5**	**J**	4.0	1.2	ug/L		09/08/18 03:00	09/14/18 01:03	2
Zinc	5.4	U	16.0	5.4	ug/L		09/08/18 03:00	09/14/18 01:03	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/08/18 03:00	09/14/18 01:03	2
Sodium	**8100**		200	75.7	ug/L		09/08/18 03:00	09/14/18 01:03	2
Magnesium	**19400**		200	65.7	ug/L		09/08/18 03:00	09/14/18 15:02	2
Potassium	**2500**		200	64.9	ug/L		09/08/18 03:00	09/14/18 01:03	2
Calcium	**72300**		200	67.6	ug/L		09/08/18 03:00	09/14/18 01:03	2
Iron	45.7	U	120	45.7	ug/L		09/08/18 03:00	09/14/18 01:03	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/14/18 01:03	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 12:39	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/14/18 11:10	09/14/18 12:39	2
Barium	**51.4**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 12:39	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 12:39	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 12:39	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:39	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:39	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 12:39	2

Client Sample ID: RW-3(77-87)-083018
Lab Sample ID: 460-163741-13
Date Collected: 08/30/18 13:35
Matrix: Water
Date Received: 08/31/18 19:30

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**428**		8.0	2.7	ug/L		09/14/18 11:10	09/14/18 12:39	2
Nickel	**1.6**	**J**	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:39	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 12:39	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 12:39	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 12:39	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/14/18 11:10	09/14/18 12:39	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 12:39	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/14/18 11:10	09/14/18 12:39	2
Sodium	**13200**		200	75.7	ug/L		09/14/18 11:10	09/14/18 12:39	2
Magnesium	**20000**		200	65.7	ug/L		09/14/18 11:10	09/14/18 12:39	2
Potassium	**2190**		200	64.9	ug/L		09/14/18 11:10	09/14/18 12:39	2
Calcium	**68000**		200	67.6	ug/L		09/14/18 11:10	09/14/18 12:39	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 12:39	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 12:39	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:41	09/07/18 10:12	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 11:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 11:18	09/10/18 13:31	1
Bicarbonate Alkalinity as CaCO3	**259**		5.0	5.0	mg/L			09/04/18 14:08	1
Alkalinity	**259**		5.0	5.0	mg/L			09/04/18 14:08	1

Client Sample ID: RW-4(333-343)-083018
Lab Sample ID: 460-163741-14
Date Collected: 08/30/18 15:50
Matrix: Water
Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 16:09	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 16:09	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/11/18 16:09*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/05/18 03:34	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/05/18 03:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/05/18 03:34	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 03:34	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/05/18 03:34	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/05/18 03:34	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/05/18 03:34	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-4(333-343)-083018
Date Collected: 08/30/18 15:50
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-14
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/05/18 03:34	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/05/18 03:34	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 03:34	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/05/18 03:34	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/05/18 03:34	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/05/18 03:34	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/05/18 03:34	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/05/18 03:34	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/05/18 03:34	1
Acetone	5.0	U	5.0	5.0	ug/L			09/05/18 03:34	1
Benzene	0.43	U	1.0	0.43	ug/L			09/05/18 03:34	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/05/18 03:34	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/05/18 03:34	1
Carbon disulfide	**0.76**	**J**	1.0	0.16	ug/L			09/05/18 03:34	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/05/18 03:34	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/05/18 03:34	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/05/18 03:34	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/05/18 03:34	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/05/18 03:34	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/05/18 03:34	1
Chloromethane	**1.1**		1.0	0.14	ug/L			09/05/18 03:34	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/05/18 03:34	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/05/18 03:34	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/05/18 03:34	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/05/18 03:34	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/05/18 03:34	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/05/18 03:34	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/05/18 03:34	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/05/18 03:34	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/05/18 03:34	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/05/18 03:34	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/05/18 03:34	1
Styrene	0.42	U	1.0	0.42	ug/L			09/05/18 03:34	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/05/18 03:34	1
Toluene	0.38	U	1.0	0.38	ug/L			09/05/18 03:34	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/05/18 03:34	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/05/18 03:34	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/05/18 03:34	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/05/18 03:34	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/05/18 03:34	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/05/18 03:34	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/05/18 03:34*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*		*09/05/18 03:34*	*1*
4-Bromofluorobenzene	*86*		*70 - 130*		*09/05/18 03:34*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*		*09/05/18 03:34*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*09/05/18 03:34*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/04/18 10:05	09/05/18 05:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*33*		*10 - 150*	*09/04/18 10:05*	*09/05/18 05:13*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 16:51	09/05/18 13:45	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 16:51	09/05/18 13:45	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 16:51	09/05/18 13:45	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		09/02/18 16:51	09/05/18 13:45	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		09/02/18 16:51	09/05/18 13:45	1
Hexachlorobenzene	**0.027**	*	0.020	0.013	ug/L		09/02/18 16:51	09/05/18 13:45	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		09/02/18 16:51	09/05/18 13:45	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 16:51	09/05/18 13:45	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		09/02/18 16:51	09/05/18 13:45	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 16:51	09/04/18 14:15	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 16:51	09/04/18 14:15	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 16:51	09/04/18 14:15	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 14:15	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 14:15	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 14:15	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 16:51	09/04/18 14:15	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 14:15	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 16:51	09/04/18 14:15	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 16:51	09/04/18 14:15	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 16:51	09/04/18 14:15	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 16:51	09/04/18 14:15	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 16:51	09/04/18 14:15	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 16:51	09/04/18 14:15	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 16:51	09/04/18 14:15	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 16:51	09/04/18 14:15	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 16:51	09/04/18 14:15	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 14:15	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 16:51	09/04/18 14:15	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		09/02/18 16:51	09/04/18 14:15	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 14:15	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 16:51	09/04/18 14:15	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 14:15	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 16:51	09/04/18 14:15	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 16:51	09/04/18 14:15	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 16:51	09/04/18 14:15	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 16:51	09/04/18 14:15	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 16:51	09/04/18 14:15	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 14:15	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 14:15	1
2,4-Dinitrophenol	14	U *	20	14	ug/L		09/02/18 16:51	09/04/18 14:15	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 16:51	09/04/18 14:15	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 16:51	09/04/18 14:15	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 16:51	09/04/18 14:15	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 16:51	09/04/18 14:15	1

Client Sample ID: RW-4(333-343)-083018
Date Collected: 08/30/18 15:50
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-14
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 16:51	09/04/18 14:15	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 14:15	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 14:15	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 14:15	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 14:15	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 14:15	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 14:15	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 16:51	09/04/18 14:15	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 16:51	09/04/18 14:15	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 16:51	09/04/18 14:15	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 16:51	09/04/18 14:15	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/02/18 16:51	09/04/18 14:15	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 16:51	09/04/18 14:15	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 14:15	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 14:15	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 16:51	09/04/18 14:15	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 16:51	09/04/18 14:15	1
Caprolactam	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 14:15	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 16:51	09/04/18 14:15	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 14:15	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 14:15	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 14:15	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 14:15	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 14:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*09/02/18 16:51*	*09/04/18 14:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*117*		*30 - 130*	*09/02/18 16:51*	*09/04/18 14:15*	*1*
Phenol-d5 (Surr)	*40*		*15 - 110*	*09/02/18 16:51*	*09/04/18 14:15*	*1*
Terphenyl-d14 (Surr)	*120*		*30 - 130*	*09/02/18 16:51*	*09/04/18 14:15*	*1*
2,4,6-Tribromophenol (Surr)	*108*		*15 - 110*	*09/02/18 16:51*	*09/04/18 14:15*	*1*
2-Fluorophenol (Surr)	*60*		*15 - 110*	*09/02/18 16:51*	*09/04/18 14:15*	*1*
2-Fluorobiphenyl	*97*		*30 - 130*	*09/02/18 16:51*	*09/04/18 14:15*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:34	1
PCB-1016	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:34	1
PCB-1221	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:34	1
PCB-1232	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:34	1
PCB-1242	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:34	1
PCB-1248	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:34	1
PCB-1254	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 10:34	1
PCB-1260	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 10:34	1
PCB-1262	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 10:34	1
PCB-1268	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 10:34	1

Client Sample ID: RW-4(333-343)-083018

Date Collected: 08/30/18 15:50
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-14

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*30 - 150*	*09/04/18 18:44*	*09/07/18 10:34*	*1*
Tetrachloro-m-xylene	*74*		*30 - 150*	*09/04/18 18:44*	*09/07/18 10:34*	*1*
DCB Decachlorobiphenyl	*80*		*30 - 150*	*09/04/18 18:44*	*09/07/18 10:34*	*1*
DCB Decachlorobiphenyl	*83*		*30 - 150*	*09/04/18 18:44*	*09/07/18 10:34*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.42**		0.12	0.078	mg/L			09/04/18 23:47	1
Sulfate	**29.7**		0.60	0.33	mg/L			09/04/18 23:47	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/14/18 01:06	2
Arsenic	**0.82**	**J**	2.0	0.77	ug/L		09/08/18 03:00	09/14/18 01:06	2
Barium	**17.3**		4.0	1.1	ug/L		09/08/18 03:00	09/14/18 01:06	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/14/18 01:06	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/14/18 01:06	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:06	2
Chromium	**16.1**		4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:06	2
Copper	1.9	U	4.0	1.9	ug/L		09/08/18 03:00	09/14/18 01:06	2
Manganese	2.7	U	8.0	2.7	ug/L		09/08/18 03:00	09/14/18 01:06	2
Nickel	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:06	2
Lead	0.37	U	1.2	0.37	ug/L		09/08/18 03:00	09/14/18 01:06	2
Antimony	**1.7**	**J**	2.0	0.62	ug/L		09/08/18 03:00	09/14/18 01:06	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/14/18 01:06	2
Vanadium	**13.4**		4.0	1.2	ug/L		09/08/18 03:00	09/14/18 01:06	2
Zinc	5.4	U	16.0	5.4	ug/L		09/08/18 03:00	09/14/18 01:06	2
Aluminum	**790**		40.0	15.0	ug/L		09/08/18 03:00	09/14/18 01:06	2
Sodium	**15500**		200	75.7	ug/L		09/08/18 03:00	09/14/18 01:06	2
Magnesium	65.7	U	200	65.7	ug/L		09/08/18 03:00	09/14/18 15:05	2
Potassium	**4400**		200	64.9	ug/L		09/08/18 03:00	09/14/18 01:06	2
Calcium	**52000**		200	67.6	ug/L		09/08/18 03:00	09/14/18 01:06	2
Iron	45.7	U	120	45.7	ug/L		09/08/18 03:00	09/14/18 01:06	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/14/18 01:06	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 12:58	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/14/18 11:10	09/14/18 12:58	2
Barium	**15.9**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 12:58	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 12:58	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 12:58	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:58	2
Chromium	**16.0**		4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:58	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 12:58	2
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 11:10	09/14/18 12:58	2
Nickel	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 12:58	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 12:58	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 12:58	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 12:58	2
Vanadium	**13.7**		4.0	1.2	ug/L		09/14/18 11:10	09/14/18 12:58	2

Client Sample ID: RW-4(333-343)-083018
Lab Sample ID: 460-163741-14
Date Collected: 08/30/18 15:50
Matrix: Water
Date Received: 08/31/18 19:30

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 12:58	2
Aluminum	**824**		40.0	15.0	ug/L		09/14/18 11:10	09/14/18 12:58	2
Sodium	**16300**		200	75.7	ug/L		09/14/18 11:10	09/14/18 12:58	2
Magnesium	65.7	U	200	65.7	ug/L		09/14/18 11:10	09/14/18 12:58	2
Potassium	**4160**		200	64.9	ug/L		09/14/18 11:10	09/14/18 12:58	2
Calcium	**34100**		200	67.6	ug/L		09/14/18 11:10	09/14/18 12:58	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 12:58	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 12:58	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:41	09/07/18 10:18	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 11:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 11:18	09/10/18 13:32	1
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			09/04/18 14:19	1
Alkalinity	**122**		5.0	5.0	mg/L			09/04/18 14:19	1

Client Sample ID: RW-4(393-403)-083018
Lab Sample ID: 460-163741-15
Date Collected: 08/30/18 15:20
Matrix: Water
Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 16:32	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 16:32	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*09/11/18 16:32*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/05/18 03:58	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/05/18 03:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/05/18 03:58	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 03:58	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/05/18 03:58	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/05/18 03:58	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/05/18 03:58	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/05/18 03:58	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/05/18 03:58	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 03:58	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/05/18 03:58	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/05/18 03:58	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/05/18 03:58	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-4(393-403)-083018
Date Collected: 08/30/18 15:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-15
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/05/18 03:58	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/05/18 03:58	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/05/18 03:58	1
Acetone	5.0	U	5.0	5.0	ug/L			09/05/18 03:58	1
Benzene	0.43	U	1.0	0.43	ug/L			09/05/18 03:58	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/05/18 03:58	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/05/18 03:58	1
Carbon disulfide	**0.64**	**J**	1.0	0.16	ug/L			09/05/18 03:58	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/05/18 03:58	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/05/18 03:58	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/05/18 03:58	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/05/18 03:58	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/05/18 03:58	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/05/18 03:58	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/05/18 03:58	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/05/18 03:58	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/05/18 03:58	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/05/18 03:58	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/05/18 03:58	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/05/18 03:58	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/05/18 03:58	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/05/18 03:58	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/05/18 03:58	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/05/18 03:58	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/05/18 03:58	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/05/18 03:58	1
Styrene	0.42	U	1.0	0.42	ug/L			09/05/18 03:58	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/05/18 03:58	1
Toluene	0.38	U	1.0	0.38	ug/L			09/05/18 03:58	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/05/18 03:58	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/05/18 03:58	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/05/18 03:58	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/05/18 03:58	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/05/18 03:58	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/05/18 03:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/05/18 03:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*		*09/05/18 03:58*	*1*
4-Bromofluorobenzene	*97*		*70 - 130*		*09/05/18 03:58*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*09/05/18 03:58*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/05/18 03:58*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/04/18 10:05	09/05/18 05:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*33*		*10 - 150*	*09/04/18 10:05*	*09/05/18 05:31*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 16:51	09/05/18 14:06	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 16:51	09/05/18 14:06	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 16:51	09/05/18 14:06	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		09/02/18 16:51	09/05/18 14:06	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		09/02/18 16:51	09/05/18 14:06	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 16:51	09/05/18 14:06	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		09/02/18 16:51	09/05/18 14:06	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 16:51	09/05/18 14:06	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		09/02/18 16:51	09/05/18 14:06	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 16:51	09/04/18 14:36	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 16:51	09/04/18 14:36	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 16:51	09/04/18 14:36	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 14:36	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 14:36	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 14:36	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 16:51	09/04/18 14:36	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 14:36	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 16:51	09/04/18 14:36	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 16:51	09/04/18 14:36	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 16:51	09/04/18 14:36	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 16:51	09/04/18 14:36	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 16:51	09/04/18 14:36	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 16:51	09/04/18 14:36	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 16:51	09/04/18 14:36	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 16:51	09/04/18 14:36	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 16:51	09/04/18 14:36	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 14:36	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 16:51	09/04/18 14:36	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		09/02/18 16:51	09/04/18 14:36	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 14:36	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 16:51	09/04/18 14:36	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 14:36	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 16:51	09/04/18 14:36	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 16:51	09/04/18 14:36	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 16:51	09/04/18 14:36	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 16:51	09/04/18 14:36	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 16:51	09/04/18 14:36	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 14:36	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 14:36	1
2,4-Dinitrophenol	14	U *	20	14	ug/L		09/02/18 16:51	09/04/18 14:36	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 16:51	09/04/18 14:36	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 16:51	09/04/18 14:36	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 16:51	09/04/18 14:36	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 16:51	09/04/18 14:36	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 16:51	09/04/18 14:36	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 14:36	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 14:36	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 14:36	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 14:36	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 14:36	1

Client Sample ID: RW-4(393-403)-083018
Date Collected: 08/30/18 15:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-15
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 14:36	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 16:51	09/04/18 14:36	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 16:51	09/04/18 14:36	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 16:51	09/04/18 14:36	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 16:51	09/04/18 14:36	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/02/18 16:51	09/04/18 14:36	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 16:51	09/04/18 14:36	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 14:36	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 14:36	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 16:51	09/04/18 14:36	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 16:51	09/04/18 14:36	1
Caprolactam	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 14:36	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 16:51	09/04/18 14:36	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 14:36	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 14:36	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 14:36	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 14:36	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 14:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*09/02/18 16:51*	*09/04/18 14:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*107*		*30 - 130*	*09/02/18 16:51*	*09/04/18 14:36*	*1*
Phenol-d5 (Surr)	*39*		*15 - 110*	*09/02/18 16:51*	*09/04/18 14:36*	*1*
Terphenyl-d14 (Surr)	*104*		*30 - 130*	*09/02/18 16:51*	*09/04/18 14:36*	*1*
2,4,6-Tribromophenol (Surr)	*99*		*15 - 110*	*09/02/18 16:51*	*09/04/18 14:36*	*1*
2-Fluorophenol (Surr)	*57*		*15 - 110*	*09/02/18 16:51*	*09/04/18 14:36*	*1*
2-Fluorobiphenyl	*83*		*30 - 130*	*09/02/18 16:51*	*09/04/18 14:36*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:58	1
PCB-1016	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:58	1
PCB-1221	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:58	1
PCB-1232	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:58	1
PCB-1242	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:58	1
PCB-1248	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 10:58	1
PCB-1254	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 10:58	1
PCB-1260	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 10:58	1
PCB-1262	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 10:58	1
PCB-1268	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 10:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*30 - 150*	*09/04/18 18:44*	*09/07/18 10:58*	*1*
Tetrachloro-m-xylene	*71*		*30 - 150*	*09/04/18 18:44*	*09/07/18 10:58*	*1*
DCB Decachlorobiphenyl	*78*		*30 - 150*	*09/04/18 18:44*	*09/07/18 10:58*	*1*
DCB Decachlorobiphenyl	*80*		*30 - 150*	*09/04/18 18:44*	*09/07/18 10:58*	*1*

Client Sample ID: RW-4(393-403)-083018
Date Collected: 08/30/18 15:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-15
Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.94**		0.12	0.078	mg/L			09/05/18 00:00	1
Sulfate	**18.4**		0.60	0.33	mg/L			09/05/18 00:00	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**18.6**		2.0	1.4	ug/L		09/08/18 03:00	09/14/18 01:10	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/08/18 03:00	09/14/18 01:10	2
Barium	**18.2**		4.0	1.1	ug/L		09/08/18 03:00	09/14/18 01:10	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/14/18 01:10	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/14/18 01:10	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:10	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:10	2
Copper	1.9	U	4.0	1.9	ug/L		09/08/18 03:00	09/14/18 01:10	2
Manganese	**8.9**		8.0	2.7	ug/L		09/08/18 03:00	09/14/18 01:10	2
Nickel	**1.3**	**J**	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:10	2
Lead	**0.46**	**J**	1.2	0.37	ug/L		09/08/18 03:00	09/14/18 01:10	2
Antimony	**1.7**	**J**	2.0	0.62	ug/L		09/08/18 03:00	09/14/18 01:10	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/14/18 01:10	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/08/18 03:00	09/14/18 01:10	2
Zinc	**8.4**	**J**	16.0	5.4	ug/L		09/08/18 03:00	09/14/18 01:10	2
Aluminum	**272**		40.0	15.0	ug/L		09/08/18 03:00	09/14/18 01:10	2
Sodium	**8540**		200	75.7	ug/L		09/08/18 03:00	09/14/18 01:10	2
Magnesium	**6340**		200	65.7	ug/L		09/08/18 03:00	09/14/18 15:07	2
Potassium	**7250**		200	64.9	ug/L		09/08/18 03:00	09/14/18 01:10	2
Calcium	**19100**		200	67.6	ug/L		09/08/18 03:00	09/14/18 01:10	2
Iron	**158**		120	45.7	ug/L		09/08/18 03:00	09/14/18 01:10	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/14/18 01:10	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 13:01	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/14/18 11:10	09/14/18 13:01	2
Barium	**14.1**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 13:01	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 13:01	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 13:01	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 13:01	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 13:01	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 13:01	2
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 11:10	09/14/18 13:01	2
Nickel	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 13:01	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 13:01	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 13:01	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 13:01	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/14/18 11:10	09/14/18 13:01	2
Zinc	5.4	U	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 13:01	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/14/18 11:10	09/14/18 13:01	2
Sodium	**7830**		200	75.7	ug/L		09/14/18 11:10	09/14/18 13:01	2
Magnesium	**6100**		200	65.7	ug/L		09/14/18 11:10	09/14/18 13:01	2
Potassium	**3600**		200	64.9	ug/L		09/14/18 11:10	09/14/18 13:01	2
Calcium	**17100**		200	67.6	ug/L		09/14/18 11:10	09/14/18 13:01	2

Client Sample ID: RW-4(393-403)-083018
Lab Sample ID: 460-163741-15
Date Collected: 08/30/18 15:20
Matrix: Water
Date Received: 08/31/18 19:30

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 13:01	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 13:01	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:41	09/07/18 10:19	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 11:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 11:18	09/10/18 13:33	1
Bicarbonate Alkalinity as CaCO3	**66.2**		5.0	5.0	mg/L			09/04/18 15:02	1
Alkalinity	**66.2**		5.0	5.0	mg/L			09/04/18 15:02	1

Client Sample ID: RW-4A(62-72)-083018
Lab Sample ID: 460-163741-16
Date Collected: 08/30/18 14:20
Matrix: Water
Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 23:18	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 23:18	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 130*		*09/11/18 23:18*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/05/18 04:21	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/05/18 04:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/05/18 04:21	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 04:21	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/05/18 04:21	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/05/18 04:21	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/05/18 04:21	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/05/18 04:21	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/05/18 04:21	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 04:21	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/05/18 04:21	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/05/18 04:21	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/05/18 04:21	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/05/18 04:21	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/05/18 04:21	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/05/18 04:21	1
Acetone	5.0	U	5.0	5.0	ug/L			09/05/18 04:21	1
Benzene	0.43	U	1.0	0.43	ug/L			09/05/18 04:21	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/05/18 04:21	1

Client Sample ID: RW-4A(62-72)-083018
Date Collected: 08/30/18 14:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-16
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	1.0	ug/L			09/05/18 04:21	1
Carbon disulfide	**0.61**	**J**	1.0	0.16	ug/L			09/05/18 04:21	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/05/18 04:21	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/05/18 04:21	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/05/18 04:21	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/05/18 04:21	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/05/18 04:21	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/05/18 04:21	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/05/18 04:21	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/05/18 04:21	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/05/18 04:21	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/05/18 04:21	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/05/18 04:21	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/05/18 04:21	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/05/18 04:21	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/05/18 04:21	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/05/18 04:21	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/05/18 04:21	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/05/18 04:21	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/05/18 04:21	1
Styrene	0.42	U	1.0	0.42	ug/L			09/05/18 04:21	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/05/18 04:21	1
Toluene	0.38	U	1.0	0.38	ug/L			09/05/18 04:21	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/05/18 04:21	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/05/18 04:21	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/05/18 04:21	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/05/18 04:21	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/05/18 04:21	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/05/18 04:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/05/18 04:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*126*		*70 - 130*		*09/05/18 04:21*	*1*
4-Bromofluorobenzene	*92*		*70 - 130*		*09/05/18 04:21*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*		*09/05/18 04:21*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*09/05/18 04:21*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/04/18 10:05	09/05/18 05:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*10 - 150*	*09/04/18 10:05*	*09/05/18 05:49*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 16:51	09/05/18 14:28	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 16:51	09/05/18 14:28	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 16:51	09/05/18 14:28	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-4A(62-72)-083018
Date Collected: 08/30/18 14:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-16
Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		09/02/18 16:51	09/05/18 14:28	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		09/02/18 16:51	09/05/18 14:28	1
Hexachlorobenzene	0.013	U *	0.020	0.013	ug/L		09/02/18 16:51	09/05/18 14:28	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		09/02/18 16:51	09/05/18 14:28	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 16:51	09/05/18 14:28	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		09/02/18 16:51	09/05/18 14:28	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 16:51	09/04/18 14:57	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 16:51	09/04/18 14:57	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 16:51	09/04/18 14:57	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 14:57	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 14:57	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 14:57	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 16:51	09/04/18 14:57	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 14:57	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 16:51	09/04/18 14:57	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 16:51	09/04/18 14:57	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 16:51	09/04/18 14:57	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 16:51	09/04/18 14:57	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 16:51	09/04/18 14:57	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 16:51	09/04/18 14:57	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 16:51	09/04/18 14:57	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 16:51	09/04/18 14:57	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 16:51	09/04/18 14:57	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 14:57	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 16:51	09/04/18 14:57	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		09/02/18 16:51	09/04/18 14:57	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 14:57	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 16:51	09/04/18 14:57	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 14:57	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 16:51	09/04/18 14:57	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 16:51	09/04/18 14:57	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 16:51	09/04/18 14:57	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 16:51	09/04/18 14:57	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 16:51	09/04/18 14:57	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 14:57	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 14:57	1
2,4-Dinitrophenol	14	U *	20	14	ug/L		09/02/18 16:51	09/04/18 14:57	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 16:51	09/04/18 14:57	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 16:51	09/04/18 14:57	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 16:51	09/04/18 14:57	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 16:51	09/04/18 14:57	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 16:51	09/04/18 14:57	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 14:57	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 14:57	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 14:57	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 14:57	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 14:57	1

Client Sample ID: RW-4A(62-72)-083018
Date Collected: 08/30/18 14:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-16
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 14:57	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 16:51	09/04/18 14:57	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 16:51	09/04/18 14:57	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 16:51	09/04/18 14:57	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 16:51	09/04/18 14:57	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/02/18 16:51	09/04/18 14:57	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 16:51	09/04/18 14:57	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 14:57	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 14:57	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 16:51	09/04/18 14:57	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 16:51	09/04/18 14:57	1
Caprolactam	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 14:57	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 16:51	09/04/18 14:57	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 14:57	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 14:57	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 14:57	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 14:57	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 14:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*09/02/18 16:51*	*09/04/18 14:57*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*114*		*30 - 130*	*09/02/18 16:51*	*09/04/18 14:57*	*1*
Phenol-d5 (Surr)	*41*		*15 - 110*	*09/02/18 16:51*	*09/04/18 14:57*	*1*
Terphenyl-d14 (Surr)	*101*		*30 - 130*	*09/02/18 16:51*	*09/04/18 14:57*	*1*
2,4,6-Tribromophenol (Surr)	*105*		*15 - 110*	*09/02/18 16:51*	*09/04/18 14:57*	*1*
2-Fluorophenol (Surr)	*60*		*15 - 110*	*09/02/18 16:51*	*09/04/18 14:57*	*1*
2-Fluorobiphenyl	*95*		*30 - 130*	*09/02/18 16:51*	*09/04/18 14:57*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 11:21	1
PCB-1016	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 11:21	1
PCB-1221	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 11:21	1
PCB-1232	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 11:21	1
PCB-1242	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 11:21	1
PCB-1248	0.12	U	0.42	0.12	ug/L		09/04/18 18:44	09/07/18 11:21	1
PCB-1254	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 11:21	1
PCB-1260	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 11:21	1
PCB-1262	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 11:21	1
PCB-1268	0.11	U	0.42	0.11	ug/L		09/04/18 18:44	09/07/18 11:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*30 - 150*	*09/04/18 18:44*	*09/07/18 11:21*	*1*
Tetrachloro-m-xylene	*79*		*30 - 150*	*09/04/18 18:44*	*09/07/18 11:21*	*1*
DCB Decachlorobiphenyl	*86*		*30 - 150*	*09/04/18 18:44*	*09/07/18 11:21*	*1*
DCB Decachlorobiphenyl	*86*		*30 - 150*	*09/04/18 18:44*	*09/07/18 11:21*	*1*

Client Sample ID: RW-4A(62-72)-083018
Date Collected: 08/30/18 14:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-16
Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.12**		0.12	0.078	mg/L			09/05/18 00:13	1
Sulfate	**9.31**		0.60	0.33	mg/L			09/05/18 00:13	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/14/18 01:17	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/08/18 03:00	09/14/18 01:17	2
Barium	**4.6**		4.0	1.1	ug/L		09/08/18 03:00	09/14/18 01:17	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/14/18 01:17	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/14/18 01:17	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:17	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:17	2
Copper	**4.8**		4.0	1.9	ug/L		09/08/18 03:00	09/14/18 01:17	2
Manganese	**3.4**	**J**	8.0	2.7	ug/L		09/08/18 03:00	09/14/18 01:17	2
Nickel	**30.0**		4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:17	2
Lead	**1.6**		1.2	0.37	ug/L		09/08/18 03:00	09/14/18 01:17	2
Antimony	**1.5**	**J**	2.0	0.62	ug/L		09/08/18 03:00	09/14/18 01:17	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/14/18 01:17	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/08/18 03:00	09/14/18 01:17	2
Zinc	**20.5**		16.0	5.4	ug/L		09/08/18 03:00	09/14/18 01:17	2
Aluminum	**163**		40.0	15.0	ug/L		09/08/18 03:00	09/14/18 01:17	2
Sodium	**5420**		200	75.7	ug/L		09/08/18 03:00	09/14/18 01:17	2
Magnesium	**3860**		200	65.7	ug/L		09/08/18 03:00	09/14/18 15:13	2
Potassium	**1300**		200	64.9	ug/L		09/08/18 03:00	09/14/18 01:17	2
Calcium	**9180**		200	67.6	ug/L		09/08/18 03:00	09/14/18 01:17	2
Iron	**220**		120	45.7	ug/L		09/08/18 03:00	09/14/18 01:17	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/14/18 01:17	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 13:03	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/14/18 11:10	09/14/18 13:03	2
Barium	**3.9**	**J**	4.0	1.1	ug/L		09/14/18 11:10	09/14/18 13:03	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 13:03	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 13:03	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 13:03	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 13:03	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 13:03	2
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 11:10	09/14/18 13:03	2
Nickel	**34.7**		4.0	1.3	ug/L		09/14/18 11:10	09/14/18 13:03	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 13:03	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 13:03	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 13:03	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/14/18 11:10	09/14/18 13:03	2
Zinc	**17.4**		16.0	5.4	ug/L		09/14/18 11:10	09/14/18 13:03	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/14/18 11:10	09/14/18 13:03	2
Sodium	**5610**		200	75.7	ug/L		09/14/18 11:10	09/14/18 13:03	2
Magnesium	**3820**		200	65.7	ug/L		09/14/18 11:10	09/14/18 13:03	2
Potassium	**1140**		200	64.9	ug/L		09/14/18 11:10	09/14/18 13:03	2
Calcium	**8680**		200	67.6	ug/L		09/14/18 11:10	09/14/18 13:03	2

Client Sample ID: RW-4A(62-72)-083018
Lab Sample ID: 460-163741-16
Date Collected: 08/30/18 14:20
Matrix: Water
Date Received: 08/31/18 19:30

Method: 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 13:03	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 13:03	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:41	09/07/18 10:21	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 11:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 11:18	09/10/18 13:34	1
Bicarbonate Alkalinity as CaCO3	**37.4**		5.0	5.0	mg/L			09/04/18 15:09	1
Alkalinity	**37.4**		5.0	5.0	mg/L			09/04/18 15:09	1

Client Sample ID: TB-06-083118
Lab Sample ID: 460-163741-17
Date Collected: 08/31/18 00:00
Matrix: Water
Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/12/18 02:00	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/12/18 02:00	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/12/18 02:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*09/12/18 02:00*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/04/18 22:03	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/04/18 22:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/04/18 22:03	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/04/18 22:03	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/04/18 22:03	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/04/18 22:03	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/04/18 22:03	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/04/18 22:03	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/04/18 22:03	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/04/18 22:03	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/04/18 22:03	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/04/18 22:03	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/04/18 22:03	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/04/18 22:03	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/04/18 22:03	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/04/18 22:03	1
Acetone	5.0	U	5.0	5.0	ug/L			09/04/18 22:03	1
Benzene	0.43	U	1.0	0.43	ug/L			09/04/18 22:03	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/04/18 22:03	1

Client Sample ID: TB-06-083118
Lab Sample ID: 460-163741-17
Date Collected: 08/31/18 00:00
Matrix: Water
Date Received: 08/31/18 19:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	1.0	ug/L			09/04/18 22:03	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/04/18 22:03	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/04/18 22:03	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/04/18 22:03	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/04/18 22:03	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/04/18 22:03	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/04/18 22:03	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/04/18 22:03	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/04/18 22:03	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/04/18 22:03	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/04/18 22:03	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/04/18 22:03	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/04/18 22:03	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/04/18 22:03	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/04/18 22:03	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/04/18 22:03	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/04/18 22:03	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/04/18 22:03	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/04/18 22:03	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/04/18 22:03	1
Styrene	0.42	U	1.0	0.42	ug/L			09/04/18 22:03	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/04/18 22:03	1
Toluene	0.38	U	1.0	0.38	ug/L			09/04/18 22:03	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/04/18 22:03	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/04/18 22:03	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/04/18 22:03	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/04/18 22:03	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/04/18 22:03	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/04/18 22:03	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/04/18 22:03*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*09/04/18 22:03*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*09/04/18 22:03*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*09/04/18 22:03*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*09/04/18 22:03*	*1*

Client Sample ID: RW-4A-(113-123)-083018
Lab Sample ID: 460-163741-18
Date Collected: 08/31/18 14:45
Matrix: Water
Date Received: 08/31/18 19:30

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 23:41	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 23:41	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 23:41	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-4A-(113-123)-083018
Date Collected: 08/31/18 14:45
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-18
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*94*		*70 - 130*		*09/11/18 23:41*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/05/18 04:45	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/05/18 04:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/05/18 04:45	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 04:45	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/05/18 04:45	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/05/18 04:45	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/05/18 04:45	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/05/18 04:45	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/05/18 04:45	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/05/18 04:45	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/05/18 04:45	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/05/18 04:45	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/05/18 04:45	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/05/18 04:45	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/05/18 04:45	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/05/18 04:45	1
Acetone	5.0	U	5.0	5.0	ug/L			09/05/18 04:45	1
Benzene	0.43	U	1.0	0.43	ug/L			09/05/18 04:45	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/05/18 04:45	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/05/18 04:45	1
Carbon disulfide	**0.48**	**J**	1.0	0.16	ug/L			09/05/18 04:45	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/05/18 04:45	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/05/18 04:45	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/05/18 04:45	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/05/18 04:45	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/05/18 04:45	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/05/18 04:45	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/05/18 04:45	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/05/18 04:45	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/05/18 04:45	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/05/18 04:45	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/05/18 04:45	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/05/18 04:45	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/05/18 04:45	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/05/18 04:45	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/05/18 04:45	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/05/18 04:45	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/05/18 04:45	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/05/18 04:45	1
Styrene	0.42	U	1.0	0.42	ug/L			09/05/18 04:45	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/05/18 04:45	1
Toluene	0.38	U	1.0	0.38	ug/L			09/05/18 04:45	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/05/18 04:45	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/05/18 04:45	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/05/18 04:45	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/05/18 04:45	1

Client Sample ID: RW-4A-(113-123)-083018
Date Collected: 08/31/18 14:45
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-18
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/05/18 04:45	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/05/18 04:45	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/05/18 04:45*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*		*09/05/18 04:45*	*1*
4-Bromofluorobenzene	*97*		*70 - 130*		*09/05/18 04:45*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*09/05/18 04:45*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/05/18 04:45*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/04/18 10:05	09/05/18 06:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*36*		*10 - 150*	*09/04/18 10:05*	*09/05/18 06:07*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 16:51	09/05/18 14:49	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 16:51	09/05/18 14:49	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 16:51	09/05/18 14:49	1
Bis(2-chloroethyl)ether	0.026	U *	0.030	0.026	ug/L		09/02/18 16:51	09/05/18 14:49	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		09/02/18 16:51	09/05/18 14:49	1
Hexachlorobenzene	**0.034**	*	0.020	0.013	ug/L		09/02/18 16:51	09/05/18 14:49	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		09/02/18 16:51	09/05/18 14:49	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 16:51	09/05/18 14:49	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		09/02/18 16:51	09/05/18 14:49	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 16:51	09/04/18 15:18	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 16:51	09/04/18 15:18	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 16:51	09/04/18 15:18	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 15:18	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 15:18	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 15:18	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 16:51	09/04/18 15:18	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 15:18	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 16:51	09/04/18 15:18	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 16:51	09/04/18 15:18	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 16:51	09/04/18 15:18	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 16:51	09/04/18 15:18	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 16:51	09/04/18 15:18	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 16:51	09/04/18 15:18	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 16:51	09/04/18 15:18	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 16:51	09/04/18 15:18	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 16:51	09/04/18 15:18	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 15:18	1

Client Sample ID: RW-4A-(113-123)-083018
Date Collected: 08/31/18 14:45
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-18
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 16:51	09/04/18 15:18	1
Hexachlorobutadiene	0.78	U *	1.0	0.78	ug/L		09/02/18 16:51	09/04/18 15:18	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 15:18	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 16:51	09/04/18 15:18	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 15:18	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 16:51	09/04/18 15:18	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 16:51	09/04/18 15:18	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 16:51	09/04/18 15:18	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 16:51	09/04/18 15:18	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 16:51	09/04/18 15:18	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 15:18	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/04/18 15:18	1
2,4-Dinitrophenol	14	U *	20	14	ug/L		09/02/18 16:51	09/04/18 15:18	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 16:51	09/04/18 15:18	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 16:51	09/04/18 15:18	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 16:51	09/04/18 15:18	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 16:51	09/04/18 15:18	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 16:51	09/04/18 15:18	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 15:18	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/04/18 15:18	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 15:18	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 15:18	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 15:18	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/04/18 15:18	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 16:51	09/04/18 15:18	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 16:51	09/04/18 15:18	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 16:51	09/04/18 15:18	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 16:51	09/04/18 15:18	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/02/18 16:51	09/04/18 15:18	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 16:51	09/04/18 15:18	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 15:18	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 15:18	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 16:51	09/04/18 15:18	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 16:51	09/04/18 15:18	1
Caprolactam	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/04/18 15:18	1
Atrazine	1.3	U *	2.0	1.3	ug/L		09/02/18 16:51	09/04/18 15:18	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/04/18 15:18	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/04/18 15:18	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/04/18 15:18	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/04/18 15:18	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/04/18 15:18	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*09/02/18 16:51*	*09/04/18 15:18*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*115*		*30 - 130*	*09/02/18 16:51*	*09/04/18 15:18*	*1*
Phenol-d5 (Surr)	*39*		*15 - 110*	*09/02/18 16:51*	*09/04/18 15:18*	*1*
Terphenyl-d14 (Surr)	*110*		*30 - 130*	*09/02/18 16:51*	*09/04/18 15:18*	*1*
2,4,6-Tribromophenol (Surr)	*107*		*15 - 110*	*09/02/18 16:51*	*09/04/18 15:18*	*1*

Client Sample ID: RW-4A-(113-123)-083018

Date Collected: 08/31/18 14:45
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-18

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*60*		*15 - 110*	*09/02/18 16:51*	*09/04/18 15:18*	*1*
2-Fluorobiphenyl	*94*		*30 - 130*	*09/02/18 16:51*	*09/04/18 15:18*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 11:44	1
PCB-1016	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 11:44	1
PCB-1221	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 11:44	1
PCB-1232	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 11:44	1
PCB-1242	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 11:44	1
PCB-1248	0.12	U	0.41	0.12	ug/L		09/04/18 18:44	09/07/18 11:44	1
PCB-1254	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 11:44	1
PCB-1260	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 11:44	1
PCB-1262	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 11:44	1
PCB-1268	0.11	U	0.41	0.11	ug/L		09/04/18 18:44	09/07/18 11:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*30 - 150*	*09/04/18 18:44*	*09/07/18 11:44*	*1*
Tetrachloro-m-xylene	*77*		*30 - 150*	*09/04/18 18:44*	*09/07/18 11:44*	*1*
DCB Decachlorobiphenyl	*82*		*30 - 150*	*09/04/18 18:44*	*09/07/18 11:44*	*1*
DCB Decachlorobiphenyl	*83*		*30 - 150*	*09/04/18 18:44*	*09/07/18 11:44*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.90**		0.12	0.078	mg/L			09/05/18 00:25	1
Sulfate	**15.2**		0.60	0.33	mg/L			09/05/18 00:25	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/14/18 01:30	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/08/18 03:00	09/14/18 01:30	2
Barium	**14.4**		4.0	1.1	ug/L		09/08/18 03:00	09/14/18 01:30	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/14/18 01:30	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/14/18 01:30	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:30	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:30	2
Copper	1.9	U	4.0	1.9	ug/L		09/08/18 03:00	09/14/18 01:30	2
Manganese	2.7	U	8.0	2.7	ug/L		09/08/18 03:00	09/14/18 01:30	2
Nickel	**24.0**		4.0	1.3	ug/L		09/08/18 03:00	09/14/18 01:30	2
Lead	**0.76**	**J**	1.2	0.37	ug/L		09/08/18 03:00	09/14/18 01:30	2
Antimony	**1.5**	**J**	2.0	0.62	ug/L		09/08/18 03:00	09/14/18 01:30	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/14/18 01:30	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/08/18 03:00	09/14/18 01:30	2
Zinc	**17.6**		16.0	5.4	ug/L		09/08/18 03:00	09/14/18 01:30	2
Aluminum	**18.3**	**J**	40.0	15.0	ug/L		09/08/18 03:00	09/14/18 01:30	2
Sodium	**5800**		200	75.7	ug/L		09/08/18 03:00	09/14/18 01:30	2
Magnesium	**4680**		200	65.7	ug/L		09/08/18 03:00	09/14/18 01:30	2
Potassium	**1520**		200	64.9	ug/L		09/08/18 03:00	09/14/18 01:30	2
Calcium	**12300**		200	67.6	ug/L		09/08/18 03:00	09/14/18 01:30	2
Iron	45.7	U	120	45.7	ug/L		09/08/18 03:00	09/14/18 01:30	2

Client Sample ID: RW-4A-(113-123)-083018
Date Collected: 08/31/18 14:45
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-18
Matrix: Water

Method: 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/14/18 01:30	2

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/14/18 11:10	09/14/18 13:06	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/14/18 11:10	09/14/18 13:06	2
Barium	**14.1**		4.0	1.1	ug/L		09/14/18 11:10	09/14/18 13:06	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/14/18 11:10	09/14/18 13:06	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/14/18 11:10	09/14/18 13:06	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 13:06	2
Chromium	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 13:06	2
Copper	1.9	U	4.0	1.9	ug/L		09/14/18 11:10	09/14/18 13:06	2
Manganese	2.7	U	8.0	2.7	ug/L		09/14/18 11:10	09/14/18 13:06	2
Nickel	**23.4**		4.0	1.3	ug/L		09/14/18 11:10	09/14/18 13:06	2
Lead	0.37	U	1.2	0.37	ug/L		09/14/18 11:10	09/14/18 13:06	2
Antimony	0.62	U	2.0	0.62	ug/L		09/14/18 11:10	09/14/18 13:06	2
Selenium	0.69	U	10.0	0.69	ug/L		09/14/18 11:10	09/14/18 13:06	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/14/18 11:10	09/14/18 13:06	2
Zinc	**14.0**	**J**	16.0	5.4	ug/L		09/14/18 11:10	09/14/18 13:06	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/14/18 11:10	09/14/18 13:06	2
Sodium	**6140**		200	75.7	ug/L		09/14/18 11:10	09/14/18 13:06	2
Magnesium	**4850**		200	65.7	ug/L		09/14/18 11:10	09/14/18 13:06	2
Potassium	**1360**		200	64.9	ug/L		09/14/18 11:10	09/14/18 13:06	2
Calcium	**11900**		200	67.6	ug/L		09/14/18 11:10	09/14/18 13:06	2
Iron	45.7	U	120	45.7	ug/L		09/14/18 11:10	09/14/18 13:06	2
Thallium	0.24	U	0.80	0.24	ug/L		09/14/18 11:10	09/14/18 13:06	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:41	09/07/18 10:23	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 11:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 11:18	09/10/18 13:35	1
Bicarbonate Alkalinity as CaCO3	**46.9**		5.0	5.0	mg/L			09/04/18 13:23	1
Alkalinity	**46.9**		5.0	5.0	mg/L			09/04/18 13:23	1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
460-163741-1	RW-11S(236-241)-083118	120	97	110	100
460-163741-2	RW-11D(262-267)-083118	121	97	109	98
460-163741-3	RW-14S(135-155)-083118	117	95	110	97
460-163741-3 MS	RW-14S(135-155)-083118	116	100	107	96
460-163741-3 MSD	RW-14S(135-155)-083118	116	96	108	96
460-163741-4	RW-15S(110-120)-083118	118	95	106	96
460-163741-5	RW-15D(127-137)-083118	121	96	112	92
460-163741-6	DUP-04-083118	123	96	111	97
460-163741-7	FB-04-083118	118	96	113	96
460-163741-8	RW-14D(175-185)-083118	122	92	109	95
460-163741-9	RW-13(150-170)-083018	123	97	113	96
460-163741-10	RW-13(100-120)-083018	116	96	110	98
460-163741-11	RW-3DS(155-160)-083018	122	96	114	97
460-163741-12	RW-3DD(175-180)-083018	121	94	114	97
460-163741-13	RW-3(77-87)-083018	119	94	113	98
460-163741-14	RW-4(333-343)-083018	121	86	115	94
460-163741-15	RW-4(393-403)-083018	121	97	113	97
460-163741-16	RW-4A(62-72)-083018	126	92	115	96
460-163741-17	TB-06-083118	117	94	109	95
460-163741-18	RW-4A-(113-123)-083018	122	97	111	100
LCS 460-549619/4	Lab Control Sample	115	98	105	97
MB 460-549619/8	Method Blank	118	95	107	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(70-130)
460-163741-1	RW-11S(236-241)-083118	101
460-163741-2	RW-11D(262-267)-083118	101
460-163741-3	RW-14S(135-155)-083118	95
460-163741-3 MS	RW-14S(135-155)-083118	95
460-163741-3 MSD	RW-14S(135-155)-083118	95
460-163741-4	RW-15S(110-120)-083118	99
460-163741-5	RW-15D(127-137)-083118	97
460-163741-6	DUP-04-083118	98
460-163741-7	FB-04-083118	98
460-163741-8	RW-14D(175-185)-083118	98
460-163741-9	RW-13(150-170)-083018	99
460-163741-10	RW-13(100-120)-083018	102
460-163741-11	RW-3DS(155-160)-083018	99
460-163741-12	RW-3DD(175-180)-083018	101

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	BFB (70-130)							
460-163741-13	RW-3(77-87)-083018	98							
460-163741-14	RW-4(333-343)-083018	95							
460-163741-15	RW-4(393-403)-083018	97							
460-163741-16	RW-4A(62-72)-083018	99							
460-163741-17	TB-06-083118	97							
460-163741-18	RW-4A-(113-123)-083018	94							
LCS 460-551032/4	Lab Control Sample	98							
LCS 460-551171/3	Lab Control Sample	99							
LCS 460-551357/5	Lab Control Sample	93							
LCS 460-551666/4	Lab Control Sample	94							
LCSD 460-551032/5	Lab Control Sample Dup	98							
LCSD 460-551171/4	Lab Control Sample Dup	98							
LCSD 460-551666/5	Lab Control Sample Dup	95							
MB 460-551032/8	Method Blank	96							
MB 460-551171/7	Method Blank	97							
MB 460-551357/8	Method Blank	96							
MB 460-551666/8	Method Blank	95							

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	NBZ (30-130)	PHL (15-110)	TPHL (30-130)	TBP (15-110)	2FP (15-110)	FBP (30-130)		
460-163741-1	RW-11S(236-241)-083118	100	26	106	113 X	42	96		
460-163741-2	RW-11D(262-267)-083118	101	24	92	132 X	39	96		
460-163741-3	RW-14S(135-155)-083118	75	20	76	124 X	31	77		
460-163741-3 MS	RW-14S(135-155)-083118	103	27	85	127 X	42	100		
460-163741-3 MSD	RW-14S(135-155)-083118	103	27	92	132 X	41	102		
460-163741-4	RW-15S(110-120)-083118	74	21	82	93	34	81		
460-163741-5	RW-15D(127-137)-083118	106	26	99	137 X	41	109		
460-163741-6	DUP-04-083118	110	28	108	135 X	44	108		
460-163741-7	FB-04-083118	114	44	115	105	64	95		
460-163741-8	RW-14D(175-185)-083118	109	39	95	116 X	58	93		
460-163741-9	RW-13(150-170)-083018	114	41	110	107	62	96		
460-163741-10	RW-13(100-120)-083018	111	38	112	114 X	60	92		
460-163741-11	RW-3DS(155-160)-083018	113	38	112	113 X	58	91		
460-163741-12	RW-3DD(175-180)-083018	113	42	111	110	64	92		
460-163741-13	RW-3(77-87)-083018	117	45	113	106	65	95		
460-163741-14	RW-4(333-343)-083018	117	40	120	108	60	97		
460-163741-15	RW-4(393-403)-083018	107	39	104	99	57	83		
460-163741-16	RW-4A(62-72)-083018	114	41	101	105	60	95		
460-163741-18	RW-4A-(113-123)-083018	115	39	110	107	60	94		
LCS 460-549338/2-A	Lab Control Sample	99	30	103	128 X	44	95		
LCS 460-549338/3-A	Lab Control Sample	104	31	105	124 X	47	94		
LCS 460-549397/2-A	Lab Control Sample	96	39	101	104	54	85		

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	PHL	TPHL	TBP	2FP	FBP
Lab Sample ID	Client Sample ID	(30-130)	(15-110)	(30-130)	(15-110)	(15-110)	(30-130)
LCS 460-549397/4-A	Lab Control Sample	117	48	117	110	69	97
LCS 460-549791/2-A	Lab Control Sample	80	26	85	96	41	84
LCS 460-549791/4-A	Lab Control Sample	83	23	93	88	38	83
LCSD 460-549397/3-A	Lab Control Sample Dup	94	42	102	103	58	83
LCSD 460-549397/5-A	Lab Control Sample Dup	120	49	120	114 X	69	102
LCSD 460-549791/3-A	Lab Control Sample Dup	83	27	90	99	42	86
LCSD 460-549791/5-A	Lab Control Sample Dup	84	26	94	90	42	86
MB 460-549338/1-A	Method Blank	104	33	112	116 X	49	96
MB 460-549397/1-A	Method Blank	89	40	96	93	55	75
MB 460-549791/1-A	Method Blank	95	30	105	105	47	96

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
2FP = 2-Fluorophenol (Surr)
FBP = 2-Fluorobiphenyl

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCBP1	DCBP2
Lab Sample ID	Client Sample ID	(30-150)	(30-150)	(30-150)	(30-150)
460-163741-1	RW-11S(236-241)-083118	81	68	81	72
460-163741-2	RW-11D(262-267)-083118	75	75	79	80
460-163741-3	RW-14S(135-155)-083118	83	35 * p	89	40 * p
460-163741-3 MS	RW-14S(135-155)-083118	85	63	85	67
460-163741-3 MSD	RW-14S(135-155)-083118	91	90	91	96
460-163741-4	RW-15S(110-120)-083118	84 p	127	86	84
460-163741-5	RW-15D(127-137)-083118	85	89	85	85
460-163741-6	DUP-04-083118	81	89	81	82
460-163741-7	FB-04-083118	81	77	81	81
460-163741-8	RW-14D(175-185)-083118	81	77	87	88
460-163741-9	RW-13(150-170)-083018	79	75	81	82
460-163741-10	RW-13(100-120)-083018	82	79	82	85
460-163741-11	RW-3DS(155-160)-083018	81	78	83	83
460-163741-12	RW-3DD(175-180)-083018	86	86	88	91
460-163741-13	RW-3(77-87)-083018	84	75	83	80
460-163741-14	RW-4(333-343)-083018	77	74	80	83
460-163741-15	RW-4(393-403)-083018	76	71	78	80
460-163741-16	RW-4A(62-72)-083018	84	79	86	86
460-163741-18	RW-4A-(113-123)-083018	80	77	82	83
LCS 460-549636/2-A	Lab Control Sample	86	86	84	90
MB 460-549636/1-A	Method Blank	81	81	78	85

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Isotope Dilution Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DXE (10-150)
460-163741-1	RW-11S(236-241)-083118	40
460-163741-2	RW-11D(262-267)-083118	35
460-163741-3	RW-14S(135-155)-083118	38
460-163741-3 MS	RW-14S(135-155)-083118	42
460-163741-3 MSD	RW-14S(135-155)-083118	38
460-163741-4	RW-15S(110-120)-083118	37
460-163741-5	RW-15D(127-137)-083118	40
460-163741-6	DUP-04-083118	41
460-163741-7	FB-04-083118	41
460-163741-8	RW-14D(175-185)-083118	32
460-163741-9	RW-13(150-170)-083018	37
460-163741-10	RW-13(100-120)-083018	35
460-163741-11	RW-3DS(155-160)-083018	36
460-163741-12	RW-3DD(175-180)-083018	38
460-163741-13	RW-3(77-87)-083018	37
460-163741-14	RW-4(333-343)-083018	33
460-163741-15	RW-4(393-403)-083018	33
460-163741-16	RW-4A(62-72)-083018	39
460-163741-18	RW-4A-(113-123)-083018	36
MB 460-549535/1-A	Method Blank	42

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DXE (10-200)
LCS 460-549535/2-A	Lab Control Sample	39

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-549619/8
Matrix: Water
Analysis Batch: 549619

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/04/18 20:53	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/04/18 20:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/04/18 20:53	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/04/18 20:53	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/04/18 20:53	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/04/18 20:53	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/04/18 20:53	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/04/18 20:53	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/04/18 20:53	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/04/18 20:53	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/04/18 20:53	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/04/18 20:53	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/04/18 20:53	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/04/18 20:53	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/04/18 20:53	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/04/18 20:53	1
Acetone	5.0	U	5.0	5.0	ug/L			09/04/18 20:53	1
Benzene	0.43	U	1.0	0.43	ug/L			09/04/18 20:53	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/04/18 20:53	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/04/18 20:53	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/04/18 20:53	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/04/18 20:53	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/04/18 20:53	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/04/18 20:53	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/04/18 20:53	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/04/18 20:53	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/04/18 20:53	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/04/18 20:53	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/04/18 20:53	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/04/18 20:53	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/04/18 20:53	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/04/18 20:53	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/04/18 20:53	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/04/18 20:53	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/04/18 20:53	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/04/18 20:53	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/04/18 20:53	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/04/18 20:53	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/04/18 20:53	1
Styrene	0.42	U	1.0	0.42	ug/L			09/04/18 20:53	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/04/18 20:53	1
Toluene	0.38	U	1.0	0.38	ug/L			09/04/18 20:53	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/04/18 20:53	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/04/18 20:53	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/04/18 20:53	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/04/18 20:53	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/04/18 20:53	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/04/18 20:53	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					09/04/18 20:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		70 - 130		09/04/18 20:53	1
4-Bromofluorobenzene	95		70 - 130		09/04/18 20:53	1
Dibromofluoromethane (Surr)	107		70 - 130		09/04/18 20:53	1
Toluene-d8 (Surr)	98		70 - 130		09/04/18 20:53	1

Lab Sample ID: LCS 460-549619/4
Matrix: Water
Analysis Batch: 549619

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	21.0		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	20.0	22.7		ug/L		113	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	14.8		ug/L		74	70 - 130
1,1,2-Trichloroethane	20.0	19.5		ug/L		98	70 - 130
1,1-Dichloroethane	20.0	20.5		ug/L		102	70 - 130
1,1-Dichloroethene	20.0	18.8		ug/L		94	70 - 130
1,2,3-Trichlorobenzene	20.0	19.2		ug/L		96	70 - 130
1,2,4-Trichlorobenzene	20.0	19.3		ug/L		97	70 - 130
1,2-Dichlorobenzene	20.0	19.8		ug/L		99	70 - 130
1,2-Dichloroethane	20.0	21.3		ug/L		106	70 - 130
1,2-Dichloropropane	20.0	20.0		ug/L		100	70 - 130
1,3-Dichlorobenzene	20.0	19.6		ug/L		98	70 - 130
1,4-Dichlorobenzene	20.0	19.7		ug/L		99	70 - 130
2-Butanone (MEK)	100	84.8		ug/L		85	40 - 160
2-Hexanone	100	90.9		ug/L		91	40 - 160
4-Methyl-2-pentanone (MIBK)	100	96.5		ug/L		97	40 - 160
Acetone	100	94.1		ug/L		94	40 - 160
Benzene	20.0	19.9		ug/L		99	70 - 130
Bromoform	20.0	21.1		ug/L		106	70 - 130
Bromomethane	20.0	20.7		ug/L		104	40 - 160
Carbon disulfide	20.0	8.52		ug/L		43	40 - 160
Carbon tetrachloride	20.0	21.5		ug/L		107	70 - 130
Chlorobenzene	20.0	18.8		ug/L		94	70 - 130
Chlorobromomethane	20.0	19.9		ug/L		99	70 - 130
Chlorodibromomethane	20.0	20.8		ug/L		104	70 - 130
Chloroethane	20.0	20.9		ug/L		105	40 - 160
Chloroform	20.0	20.6		ug/L		103	70 - 130
Chloromethane	20.0	20.1		ug/L		100	40 - 160
cis-1,2-Dichloroethene	20.0	20.6		ug/L		103	70 - 130
cis-1,3-Dichloropropene	20.0	19.1		ug/L		96	70 - 130
Cyclohexane	20.0	17.8		ug/L		89	70 - 130
Dichlorobromomethane	20.0	21.3		ug/L		107	70 - 130
Dichlorodifluoromethane	20.0	16.3		ug/L		81	40 - 160
Ethylbenzene	20.0	18.7		ug/L		94	70 - 130
Isopropylbenzene	20.0	20.2		ug/L		101	70 - 130
Methyl acetate	40.0	46.5		ug/L		116	70 - 130
Methyl tert-butyl ether	20.0	21.3		ug/L		106	70 - 130
Methylcyclohexane	20.0	17.6		ug/L		88	70 - 130
Methylene Chloride	20.0	19.6		ug/L		98	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-549619/4
Matrix: Water
Analysis Batch: 549619

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	20.0	19.3		ug/L		97	70 - 130
Tetrachloroethene	20.0	18.1		ug/L		91	70 - 130
Toluene	20.0	19.2		ug/L		96	70 - 130
trans-1,2-Dichloroethene	20.0	19.3		ug/L		97	70 - 130
trans-1,3-Dichloropropene	20.0	19.5		ug/L		97	70 - 130
Trichloroethene	20.0	18.8		ug/L		94	70 - 130
Trichlorofluoromethane	20.0	19.4		ug/L		97	40 - 160
Vinyl chloride	20.0	19.5		ug/L		97	70 - 130
Xylenes, Total	40.0	37.6		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*
4-Bromofluorobenzene	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 549619

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.24	U	20.0	22.1		ug/L		110	70 - 130
1,1,2,2-Tetrachloroethane	0.37	U	20.0	22.3		ug/L		111	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	15.8		ug/L		79	70 - 130
1,1,2-Trichloroethane	0.43	U	20.0	18.5		ug/L		92	70 - 130
1,1-Dichloroethane	0.26	U	20.0	21.8		ug/L		109	70 - 130
1,1-Dichloroethene	0.12	U	20.0	19.4		ug/L		97	70 - 130
1,2,3-Trichlorobenzene	0.36	U	20.0	18.0		ug/L		90	70 - 130
1,2,4-Trichlorobenzene	0.37	U	20.0	17.7		ug/L		89	70 - 130
1,2-Dichlorobenzene	0.43	U	20.0	19.5		ug/L		98	70 - 130
1,2-Dichloroethane	0.43	U	20.0	19.6		ug/L		98	70 - 130
1,2-Dichloropropane	0.35	U	20.0	20.0		ug/L		100	70 - 130
1,3-Dichlorobenzene	0.34	U	20.0	20.4		ug/L		102	70 - 130
1,4-Dichlorobenzene	0.76	U	20.0	20.2		ug/L		101	70 - 130
2-Butanone (MEK)	1.9	U	100	86.2		ug/L		86	40 - 160
2-Hexanone	2.9	U	100	100		ug/L		100	40 - 160
4-Methyl-2-pentanone (MIBK)	2.7	U	100	107		ug/L		107	40 - 160
Acetone	5.0	U	100	99.3		ug/L		99	40 - 160
Benzene	0.43	U	20.0	19.3		ug/L		97	70 - 130
Bromoform	0.54	U	20.0	20.3		ug/L		102	70 - 130
Bromomethane	1.0	U	20.0	20.5		ug/L		102	40 - 160
Carbon disulfide	0.54	J	20.0	19.6		ug/L		95	40 - 160
Carbon tetrachloride	0.21	U	20.0	22.1		ug/L		111	70 - 130
Chlorobenzene	0.38	U	20.0	18.2		ug/L		91	70 - 130
Chlorobromomethane	0.41	U	20.0	19.8		ug/L		99	70 - 130
Chlorodibromomethane	0.28	U	20.0	19.4		ug/L		97	70 - 130
Chloroethane	0.32	U	20.0	21.8		ug/L		109	40 - 160

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 549619

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	0.33	U	20.0	21.6		ug/L		108	70 - 130
Chloromethane	0.14	U	20.0	21.2		ug/L		106	40 - 160
cis-1,2-Dichloroethene	0.22	U	20.0	19.8		ug/L		99	70 - 130
cis-1,3-Dichloropropene	0.46	U	20.0	16.3		ug/L		82	70 - 130
Cyclohexane	0.32	U	20.0	17.6		ug/L		88	70 - 130
Dichlorobromomethane	0.34	U	20.0	20.9		ug/L		104	70 - 130
Dichlorodifluoromethane	0.12	U	20.0	15.4		ug/L		77	40 - 160
Ethylbenzene	0.30	U	20.0	18.1		ug/L		91	70 - 130
Isopropylbenzene	0.34	U	20.0	19.4		ug/L		97	70 - 130
Methyl acetate	0.31	U	40.0	43.8		ug/L		109	70 - 130
Methyl tert-butyl ether	0.47	U	20.0	20.0		ug/L		100	70 - 130
Methylcyclohexane	0.26	U	20.0	17.6		ug/L		88	70 - 130
Methylene Chloride	0.32	J	20.0	20.6		ug/L		102	70 - 130
Styrene	0.42	U	20.0	18.5		ug/L		92	70 - 130
Tetrachloroethene	0.25	U	20.0	17.7		ug/L		89	70 - 130
Toluene	0.38	U	20.0	19.3		ug/L		96	70 - 130
trans-1,2-Dichloroethene	0.24	U	20.0	20.9		ug/L		105	70 - 130
trans-1,3-Dichloropropene	0.49	U	20.0	16.2		ug/L		81	70 - 130
Trichloroethene	0.31	U	20.0	18.2		ug/L		91	70 - 130
Trichlorofluoromethane	0.14	U	20.0	20.4		ug/L		102	40 - 160
Vinyl chloride	0.17	U	20.0	19.1		ug/L		95	70 - 130
Xylenes, Total	0.65	U	40.0	37.2		ug/L		93	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*107*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: 460-163741-3 MSD
Matrix: Water
Analysis Batch: 549619

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.24	U	20.0	21.2		ug/L		106	70 - 130	4	20
1,1,2,2-Tetrachloroethane	0.37	U	20.0	21.5		ug/L		108	70 - 130	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	16.2		ug/L		81	70 - 130	2	20
1,1,2-Trichloroethane	0.43	U	20.0	18.6		ug/L		93	70 - 130	1	20
1,1-Dichloroethane	0.26	U	20.0	20.8		ug/L		104	70 - 130	5	20
1,1-Dichloroethene	0.12	U	20.0	17.9		ug/L		90	70 - 130	8	20
1,2,3-Trichlorobenzene	0.36	U	20.0	19.4		ug/L		97	70 - 130	8	20
1,2,4-Trichlorobenzene	0.37	U	20.0	18.2		ug/L		91	70 - 130	2	20
1,2-Dichlorobenzene	0.43	U	20.0	19.4		ug/L		97	70 - 130	1	20
1,2-Dichloroethane	0.43	U	20.0	19.8		ug/L		99	70 - 130	1	20
1,2-Dichloropropane	0.35	U	20.0	19.4		ug/L		97	70 - 130	3	20
1,3-Dichlorobenzene	0.34	U	20.0	19.6		ug/L		98	70 - 130	4	20
1,4-Dichlorobenzene	0.76	U	20.0	20.0		ug/L		100	70 - 130	1	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-163741-3 MSD
Matrix: Water
Analysis Batch: 549619

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Butanone (MEK)	1.9	U	100	85.7		ug/L		86	40 - 160	1	20
2-Hexanone	2.9	U	100	103		ug/L		103	40 - 160	3	20
4-Methyl-2-pentanone (MIBK)	2.7	U	100	108		ug/L		108	40 - 160	1	20
Acetone	5.0	U	100	114		ug/L		114	40 - 160	14	20
Benzene	0.43	U	20.0	19.7		ug/L		99	70 - 130	2	20
Bromoform	0.54	U	20.0	21.4		ug/L		107	70 - 130	5	20
Bromomethane	1.0	U	20.0	20.7		ug/L		104	40 - 160	1	20
Carbon disulfide	0.54	J	20.0	19.5		ug/L		95	40 - 160	0	20
Carbon tetrachloride	0.21	U	20.0	21.4		ug/L		107	70 - 130	3	20
Chlorobenzene	0.38	U	20.0	18.3		ug/L		91	70 - 130	0	20
Chlorobromomethane	0.41	U	20.0	19.2		ug/L		96	70 - 130	3	20
Chlorodibromomethane	0.28	U	20.0	19.7		ug/L		98	70 - 130	1	20
Chloroethane	0.32	U	20.0	19.5		ug/L		97	40 - 160	11	20
Chloroform	0.33	U	20.0	21.0		ug/L		105	70 - 130	3	20
Chloromethane	0.14	U	20.0	21.5		ug/L		108	40 - 160	2	20
cis-1,2-Dichloroethene	0.22	U	20.0	20.1		ug/L		100	70 - 130	1	20
cis-1,3-Dichloropropene	0.46	U	20.0	17.5		ug/L		88	70 - 130	7	20
Cyclohexane	0.32	U	20.0	17.0		ug/L		85	70 - 130	3	20
Dichlorobromomethane	0.34	U	20.0	21.3		ug/L		107	70 - 130	2	20
Dichlorodifluoromethane	0.12	U	20.0	14.9		ug/L		74	40 - 160	3	20
Ethylbenzene	0.30	U	20.0	18.3		ug/L		92	70 - 130	1	20
Isopropylbenzene	0.34	U	20.0	20.1		ug/L		101	70 - 130	4	20
Methyl acetate	0.31	U	40.0	42.4		ug/L		106	70 - 130	3	20
Methyl tert-butyl ether	0.47	U	20.0	19.7		ug/L		98	70 - 130	1	20
Methylcyclohexane	0.26	U	20.0	16.9		ug/L		85	70 - 130	4	20
Methylene Chloride	0.32	J	20.0	20.6		ug/L		101	70 - 130	0	20
Styrene	0.42	U	20.0	19.2		ug/L		96	70 - 130	4	20
Tetrachloroethene	0.25	U	20.0	17.7		ug/L		88	70 - 130	0	20
Toluene	0.38	U	20.0	19.3		ug/L		97	70 - 130	0	20
trans-1,2-Dichloroethene	0.24	U	20.0	19.8		ug/L		99	70 - 130	6	20
trans-1,3-Dichloropropene	0.49	U	20.0	17.4		ug/L		87	70 - 130	7	20
Trichloroethene	0.31	U	20.0	18.2		ug/L		91	70 - 130	0	20
Trichlorofluoromethane	0.14	U	20.0	20.0		ug/L		100	40 - 160	2	20
Vinyl chloride	0.17	U	20.0	20.0		ug/L		100	70 - 130	5	20
Xylenes, Total	0.65	U	40.0	37.3		ug/L		93	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*
4-Bromofluorobenzene	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-551032/8
Matrix: Water
Analysis Batch: 551032

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/10/18 22:13	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/10/18 22:13	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/10/18 22:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*09/10/18 22:13*	*1*

Lab Sample ID: LCS 460-551032/4
Matrix: Water
Analysis Batch: 551032

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.0500	0.0446		ug/L		89	40 - 160		
Ethylene Dibromide			0.0500	0.0524		ug/L		105	70 - 130		
1,2,3-Trichloropropane			0.0500	0.0505		ug/L		101	40 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 130*

Lab Sample ID: LCSD 460-551032/5
Matrix: Water
Analysis Batch: 551032

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.0500	0.0436		ug/L		87	40 - 160	2	20
Ethylene Dibromide			0.0500	0.0520		ug/L		104	70 - 130	1	20
1,2,3-Trichloropropane			0.0500	0.0513		ug/L		103	40 - 160	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 130*

Lab Sample ID: MB 460-551171/7
Matrix: Water
Analysis Batch: 551171

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 09:12	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 09:12	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 09:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 130*		*09/11/18 09:12*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-551171/3
Matrix: Water
Analysis Batch: 551171

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.0500	0.0398		ug/L		80	40 - 160		
Ethylene Dibromide			0.0500	0.0476		ug/L		95	70 - 130		
1,2,3-Trichloropropane			0.0500	0.0487		ug/L		97	40 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*70 - 130*

Lab Sample ID: LCSD 460-551171/4
Matrix: Water
Analysis Batch: 551171

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.0500	0.0397		ug/L		79	40 - 160	0	20
Ethylene Dibromide			0.0500	0.0484		ug/L		97	70 - 130	2	20
1,2,3-Trichloropropane			0.0500	0.0476		ug/L		95	40 - 160	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 130*

Lab Sample ID: MB 460-551357/8
Matrix: Water
Analysis Batch: 551357

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 22:32	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 22:32	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 22:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*09/11/18 22:32*	*1*

Lab Sample ID: LCS 460-551357/5
Matrix: Water
Analysis Batch: 551357

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.0500	0.0467		ug/L		93	40 - 160		
Ethylene Dibromide			0.0500	0.0518		ug/L		104	70 - 130		
1,2,3-Trichloropropane			0.0500	0.0532		ug/L		106	40 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-551666/8
Matrix: Water
Analysis Batch: 551666

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/12/18 20:56	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/12/18 20:56	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/12/18 20:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/12/18 20:56*	*1*

Lab Sample ID: LCS 460-551666/4
Matrix: Water
Analysis Batch: 551666

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.0500	0.0366		ug/L		73	40 - 160		
Ethylene Dibromide			0.0500	0.0471		ug/L		94	70 - 130		
1,2,3-Trichloropropane			0.0500	0.0470		ug/L		94	40 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*70 - 130*

Lab Sample ID: LCSD 460-551666/5
Matrix: Water
Analysis Batch: 551666

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.0500	0.0350		ug/L		70	40 - 160	4	20
Ethylene Dibromide			0.0500	0.0457		ug/L		91	70 - 130	3	20
1,2,3-Trichloropropane			0.0500	0.0455		ug/L		91	40 - 160	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*70 - 130*

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 551666

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane	0.0040	U	0.0500	0.0355		ug/L		71	40 - 160		
Ethylene Dibromide	0.0010	U	0.0500	0.0491		ug/L		98	70 - 130		
1,2,3-Trichloropropane	0.0030	U	0.0500	0.0458		ug/L		92	40 - 160		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-163741-3 MSD
Matrix: Water
Analysis Batch: 551666

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.0040	U	0.0500	0.0363		ug/L		73	40 - 160	2	20
Ethylene Dibromide	0.0010	U	0.0500	0.0476		ug/L		95	70 - 130	3	20
1,2,3-Trichloropropane	0.0030	U	0.0500	0.0472		ug/L		94	40 - 160	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*70 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-549338/1-A
Matrix: Water
Analysis Batch: 549364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549338

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 06:57	09/02/18 16:32	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 06:57	09/02/18 16:32	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 06:57	09/02/18 16:32	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 16:32	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 16:32	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 16:32	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 06:57	09/02/18 16:32	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 06:57	09/02/18 16:32	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 06:57	09/02/18 16:32	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 06:57	09/02/18 16:32	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 06:57	09/02/18 16:32	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 06:57	09/02/18 16:32	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 06:57	09/02/18 16:32	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		09/02/18 06:57	09/02/18 16:32	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		09/02/18 06:57	09/02/18 16:32	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 06:57	09/02/18 16:32	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 06:57	09/02/18 16:32	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 06:57	09/02/18 16:32	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 06:57	09/02/18 16:32	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 16:32	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 06:57	09/02/18 16:32	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		09/02/18 06:57	09/02/18 16:32	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 16:32	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 06:57	09/02/18 16:32	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 16:32	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 06:57	09/02/18 16:32	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 06:57	09/02/18 16:32	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 06:57	09/02/18 16:32	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 06:57	09/02/18 16:32	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 06:57	09/02/18 16:32	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 16:32	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 06:57	09/02/18 16:32	1
2,4-Dinitrophenol	14	U	20	14	ug/L		09/02/18 06:57	09/02/18 16:32	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-549338/1-A
Matrix: Water
Analysis Batch: 549364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549338

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 06:57	09/02/18 16:32	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 06:57	09/02/18 16:32	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 06:57	09/02/18 16:32	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 06:57	09/02/18 16:32	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 06:57	09/02/18 16:32	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 16:32	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		09/02/18 06:57	09/02/18 16:32	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 06:57	09/02/18 16:32	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 06:57	09/02/18 16:32	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 06:57	09/02/18 16:32	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 06:57	09/02/18 16:32	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 06:57	09/02/18 16:32	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 06:57	09/02/18 16:32	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 06:57	09/02/18 16:32	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		09/02/18 06:57	09/02/18 16:32	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 06:57	09/02/18 16:32	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 06:57	09/02/18 16:32	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/02/18 06:57	09/02/18 16:32	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		09/02/18 06:57	09/02/18 16:32	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 06:57	09/02/18 16:32	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		09/02/18 06:57	09/02/18 16:32	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		09/02/18 06:57	09/02/18 16:32	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		09/02/18 06:57	09/02/18 16:32	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 06:57	09/02/18 16:32	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 16:32	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 06:57	09/02/18 16:32	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 06:57	09/02/18 16:32	1
Caprolactam	0.68	U	10	0.68	ug/L		09/02/18 06:57	09/02/18 16:32	1
Atrazine	1.3	U	2.0	1.3	ug/L		09/02/18 06:57	09/02/18 16:32	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 06:57	09/02/18 16:32	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 06:57	09/02/18 16:32	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 06:57	09/02/18 16:32	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 06:57	09/02/18 16:32	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 06:57	09/02/18 16:32	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Eicosane	*6.73*	*J N*	*ug/L*		*14.80*	*112-95-8*	*09/02/18 06:57*	*09/02/18 16:32*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*104*		*30 - 130*	*09/02/18 06:57*	*09/02/18 16:32*	*1*
Phenol-d5 (Surr)	*33*		*15 - 110*	*09/02/18 06:57*	*09/02/18 16:32*	*1*
Terphenyl-d14 (Surr)	*112*		*30 - 130*	*09/02/18 06:57*	*09/02/18 16:32*	*1*
2,4,6-Tribromophenol (Surr)	*116*	*X*	*15 - 110*	*09/02/18 06:57*	*09/02/18 16:32*	*1*
2-Fluorophenol (Surr)	*49*		*15 - 110*	*09/02/18 06:57*	*09/02/18 16:32*	*1*
2-Fluorobiphenyl	*96*		*30 - 130*	*09/02/18 06:57*	*09/02/18 16:32*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-549338/2-A
Matrix: Water
Analysis Batch: 549364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549338

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	80.0	30.5		ug/L		38	20 - 160
2-Chlorophenol	80.0	65.1		ug/L		81	70 - 130
2-Methylphenol	80.0	55.9		ug/L		70	70 - 130
4-Methylphenol	80.0	55.0		ug/L		69	20 - 160
2-Nitrophenol	80.0	83.3		ug/L		104	70 - 130
2,4-Dimethylphenol	80.0	70.1		ug/L		88	70 - 130
2,4-Dichlorophenol	80.0	81.6		ug/L		102	70 - 130
4-Chloro-3-methylphenol	80.0	77.9		ug/L		97	20 - 160
2,4,6-Trichlorophenol	80.0	82.0		ug/L		102	70 - 130
2,4,5-Trichlorophenol	80.0	77.3		ug/L		97	20 - 160
2,4-Dinitrotoluene	80.0	101		ug/L		127	70 - 130
4-Nitrophenol	160	79.8		ug/L		50	20 - 160
4,6-Dinitro-2-methylphenol	160	162		ug/L		101	20 - 160
Pentachlorophenol	160	160		ug/L		100	20 - 160
Bis(2-chloroethyl)ether	80.0	68.0		ug/L		85	70 - 130
N-Nitrosodi-n-propylamine	80.0	81.9		ug/L		102	70 - 130
Hexachloroethane	80.0	72.6		ug/L		91	20 - 160
Nitrobenzene	80.0	79.6		ug/L		99	70 - 130
Isophorone	80.0	82.2		ug/L		103	70 - 130
Naphthalene	80.0	78.4		ug/L		98	70 - 130
4-Chloroaniline	80.0	78.8		ug/L		99	20 - 160
Hexachlorobutadiene	80.0	88.5		ug/L		111	70 - 130
2-Methylnaphthalene	80.0	84.2		ug/L		105	70 - 130
Hexachlorocyclopentadiene	80.0	71.8		ug/L		90	20 - 160
2-Chloronaphthalene	80.0	78.8		ug/L		99	70 - 130
2-Nitroaniline	80.0	91.1		ug/L		114	20 - 160
Dimethyl phthalate	80.0	88.2		ug/L		110	70 - 130
Acenaphthylene	80.0	88.2		ug/L		110	70 - 130
2,6-Dinitrotoluene	80.0	92.8		ug/L		116	70 - 130
3-Nitroaniline	80.0	75.7		ug/L		95	20 - 160
Acenaphthene	80.0	75.6		ug/L		95	70 - 130
Dibenzofuran	80.0	85.6		ug/L		107	70 - 130
2,4-Dinitrophenol	160	134		ug/L		84	20 - 160
Diethyl phthalate	80.0	91.7		ug/L		115	70 - 130
4-Chlorophenyl phenyl ether	80.0	95.5		ug/L		119	70 - 130
Fluorene	80.0	91.7		ug/L		115	70 - 130
4-Nitroaniline	80.0	87.0		ug/L		109	20 - 160
N-Nitrosodiphenylamine	80.0	80.3		ug/L		100	70 - 130
4-Bromophenyl phenyl ether	80.0	83.7		ug/L		105	70 - 130
Hexachlorobenzene	80.0	89.1		ug/L		111	70 - 130
Phenanthrene	80.0	83.0		ug/L		104	70 - 130
Anthracene	80.0	82.8		ug/L		104	70 - 130
Carbazole	80.0	85.1		ug/L		106	70 - 130
Di-n-butyl phthalate	80.0	92.5		ug/L		116	70 - 130
Fluoranthene	80.0	93.0		ug/L		116	70 - 130
Pyrene	80.0	89.8		ug/L		112	70 - 130
Butyl benzyl phthalate	80.0	92.2		ug/L		115	70 - 130
Benzo[a]anthracene	80.0	89.3		ug/L		112	70 - 130

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-549338/2-A
Matrix: Water
Analysis Batch: 549364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549338

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	80.0	90.6		ug/L		113	70 - 130
Bis(2-ethylhexyl) phthalate	80.0	92.8		ug/L		116	70 - 130
Di-n-octyl phthalate	80.0	114	*	ug/L		143	70 - 130
Benzo[b]fluoranthene	80.0	98.5		ug/L		123	70 - 130
Benzo[k]fluoranthene	80.0	95.3		ug/L		119	70 - 130
Benzo[a]pyrene	80.0	95.2		ug/L		119	70 - 130
Indeno[1,2,3-cd]pyrene	80.0	84.2		ug/L		105	70 - 130
Dibenz(a,h)anthracene	80.0	83.6		ug/L		104	70 - 130
Benzo[g,h,i]perylene	80.0	78.0		ug/L		97	70 - 130
1,1'-Biphenyl	80.0	79.6		ug/L		100	70 - 130
Acetophenone	80.0	84.0		ug/L		105	70 - 130
2,2'-oxybis[1-chloropropane]	80.0	61.1		ug/L		76	70 - 130
1,2,4,5-Tetrachlorobenzene	80.0	83.3		ug/L		104	70 - 130
2,3,4,6-Tetrachlorophenol	80.0	88.7		ug/L		111	70 - 130
3,3'-Dichlorobenzidine	80.0	78.5		ug/L		98	70 - 130
Bis(2-chloroethoxy)methane	80.0	76.3		ug/L		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	99		30 - 130
Phenol-d5 (Surr)	30		15 - 110
Terphenyl-d14 (Surr)	103		30 - 130
2,4,6-Tribromophenol (Surr)	128	X	15 - 110
2-Fluorophenol (Surr)	44		15 - 110
2-Fluorobiphenyl	95		30 - 130

Lab Sample ID: LCS 460-549338/3-A
Matrix: Water
Analysis Batch: 549364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549338

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	160	65.1		ug/L		41	20 - 160
Caprolactam	160	14.7	*	ug/L		9	20 - 160
Atrazine	160	53.1	*	ug/L		33	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	104		30 - 130
Phenol-d5 (Surr)	31		15 - 110
Terphenyl-d14 (Surr)	105		30 - 130
2,4,6-Tribromophenol (Surr)	124	X	15 - 110
2-Fluorophenol (Surr)	47		15 - 110
2-Fluorobiphenyl	94		30 - 130

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 549364

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA
Prep Batch: 549338

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	0.29	U	80.0	26.1		ug/L		33	20 - 160

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-163741-3 MS | **Client Sample ID: RW-14S(135-155)-083118**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 549364 | **Prep Batch: 549338**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorophenol	0.38	U	80.0	60.4		ug/L		76	70 - 130
2-Methylphenol	0.26	U F1	80.0	54.0	F1	ug/L		67	70 - 130
4-Methylphenol	0.24	U	80.0	49.2		ug/L		61	20 - 160
2-Nitrophenol	0.75	U	80.0	80.6		ug/L		101	70 - 130
2,4-Dimethylphenol	0.24	U	80.0	70.1		ug/L		88	70 - 130
2,4-Dichlorophenol	0.42	U	80.0	77.6		ug/L		97	70 - 130
4-Chloro-3-methylphenol	0.58	U	80.0	76.7		ug/L		96	20 - 160
2,4,6-Trichlorophenol	0.30	U	80.0	76.5		ug/L		96	20 - 160
2,4,5-Trichlorophenol	0.28	U	80.0	74.8		ug/L		93	20 - 160
2,4-Dinitrotoluene	1.0	U	80.0	97.1		ug/L		121	70 - 130
4-Nitrophenol	0.69	U	160	71.1		ug/L		44	20 - 160
4,6-Dinitro-2-methylphenol	13	U	160	161		ug/L		101	20 - 160
Pentachlorophenol	1.4	U	160	161		ug/L		100	20 - 160
Bis(2-chloroethyl)ether	0.30	U	80.0	65.5		ug/L		82	70 - 130
N-Nitrosodi-n-propylamine	0.43	U	80.0	77.1		ug/L		96	70 - 130
Hexachloroethane	1.2	U	80.0	76.4		ug/L		95	20 - 160
Nitrobenzene	0.57	U	80.0	76.5		ug/L		96	70 - 130
Isophorone	0.80	U	80.0	82.8		ug/L		103	70 - 130
Naphthalene	1.1	U	80.0	80.6		ug/L		101	70 - 130
4-Chloroaniline	1.9	U	80.0	63.5		ug/L		79	20 - 160
Hexachlorobutadiene	0.78	U	80.0	92.9		ug/L		116	70 - 130
2-Methylnaphthalene	1.1	U	80.0	85.2		ug/L		107	70 - 130
Hexachlorocyclopentadiene	1.7	U	80.0	94.9		ug/L		119	20 - 160
2-Chloronaphthalene	1.2	U	80.0	81.2		ug/L		101	70 - 130
2-Nitroaniline	0.47	U	80.0	91.1		ug/L		114	20 - 160
Dimethyl phthalate	0.77	U	80.0	87.7		ug/L		110	70 - 130
Acenaphthylene	0.82	U	80.0	88.9		ug/L		111	70 - 130
2,6-Dinitrotoluene	0.39	U	80.0	90.3		ug/L		113	70 - 130
3-Nitroaniline	0.96	U	80.0	63.9		ug/L		80	20 - 160
Acenaphthene	1.1	U	80.0	76.6		ug/L		96	70 - 130
Dibenzofuran	1.1	U	80.0	85.2		ug/L		107	70 - 130
2,4-Dinitrophenol	14	U	160	161		ug/L		101	20 - 160
Diethyl phthalate	0.98	U	80.0	89.2		ug/L		112	70 - 130
4-Chlorophenyl phenyl ether	1.3	U	80.0	94.5		ug/L		118	70 - 130
Fluorene	0.91	U	80.0	90.6		ug/L		113	70 - 130
4-Nitroaniline	0.54	U	80.0	81.1		ug/L		101	20 - 160
N-Nitrosodiphenylamine	0.89	U	80.0	83.9		ug/L		105	70 - 130
4-Bromophenyl phenyl ether	0.75	U	80.0	89.9		ug/L		112	70 - 130
Hexachlorobenzene	0.40	U	80.0	92.9		ug/L		116	70 - 130
Phenanthrene	0.58	U	80.0	86.3		ug/L		108	70 - 130
Anthracene	0.63	U	80.0	86.5		ug/L		108	70 - 130
Carbazole	0.68	U	80.0	85.5		ug/L		107	70 - 130
Di-n-butyl phthalate	0.84	U	80.0	93.7		ug/L		117	70 - 130
Fluoranthene	0.84	U	80.0	92.9		ug/L		116	70 - 130
Pyrene	1.6	U	80.0	85.2		ug/L		106	70 - 130
Butyl benzyl phthalate	0.85	U	80.0	89.6		ug/L		112	70 - 130
Benzo[a]anthracene	0.59	U	80.0	88.1		ug/L		110	70 - 130
Chrysene	0.91	U	80.0	88.6		ug/L		111	70 - 130

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 549364

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA
Prep Batch: 549338

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	94.2		ug/L		118	70 - 130
Di-n-octyl phthalate	4.8	U F1 *	80.0	108	F1	ug/L		135	70 - 130
Benzo[b]fluoranthene	1.1	U	80.0	94.2		ug/L		118	70 - 130
Benzo[k]fluoranthene	0.67	U	80.0	91.0		ug/L		114	70 - 130
Benzo[a]pyrene	0.41	U	80.0	91.4		ug/L		114	70 - 130
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	86.4		ug/L		108	70 - 130
Dibenz(a,h)anthracene	0.72	U	80.0	85.4		ug/L		107	70 - 130
Benzo[g,h,i]perylene	1.4	U	80.0	79.6		ug/L		99	70 - 130
1,1'-Biphenyl	1.2	U	80.0	81.6		ug/L		102	70 - 130
Acetophenone	0.79	U	80.0	81.9		ug/L		102	70 - 130
Benzaldehyde	0.59	U	160	158		ug/L		99	20 - 160
Caprolactam	0.68	U *	160	39.7		ug/L		25	20 - 160
Atrazine	1.3	U F1 *	160	216	E F1	ug/L		135	70 - 130
2,2'-oxybis[1-chloropropane]	0.63	U	80.0	60.0		ug/L		75	70 - 130
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	85.7		ug/L		107	70 - 130
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	87.3		ug/L		109	70 - 130
3,3'-Dichlorobenzidine	1.4	U	80.0	61.9		ug/L		77	70 - 130
Bis(2-chloroethoxy)methane	0.24	U	80.0	76.8		ug/L		96	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*103*		*30 - 130*
Phenol-d5 (Surr)	*27*		*15 - 110*
Terphenyl-d14 (Surr)	*85*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*127*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*42*		*15 - 110*
2-Fluorobiphenyl	*100*		*30 - 130*

Lab Sample ID: 460-163741-3 MSD
Matrix: Water
Analysis Batch: 549364

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA
Prep Batch: 549338

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	0.29	U	80.0	26.9		ug/L		34	20 - 160	3	20
2-Chlorophenol	0.38	U	80.0	62.3		ug/L		78	70 - 130	3	20
2-Methylphenol	0.26	U F1	80.0	55.0	F1	ug/L		69	70 - 130	2	20
4-Methylphenol	0.24	U	80.0	51.2		ug/L		64	20 - 160	4	20
2-Nitrophenol	0.75	U	80.0	82.9		ug/L		104	70 - 130	3	20
2,4-Dimethylphenol	0.24	U	80.0	72.3		ug/L		90	70 - 130	3	20
2,4-Dichlorophenol	0.42	U	80.0	80.7		ug/L		101	70 - 130	4	20
4-Chloro-3-methylphenol	0.58	U	80.0	80.9		ug/L		101	20 - 160	5	20
2,4,6-Trichlorophenol	0.30	U	80.0	78.7		ug/L		98	20 - 160	3	20
2,4,5-Trichlorophenol	0.28	U	80.0	76.0		ug/L		95	20 - 160	2	20
2,4-Dinitrotoluene	1.0	U	80.0	101		ug/L		127	70 - 130	4	20
4-Nitrophenol	0.69	U	160	69.4		ug/L		43	20 - 160	2	20
4,6-Dinitro-2-methylphenol	13	U	160	159		ug/L		99	20 - 160	2	20
Pentachlorophenol	1.4	U	160	156		ug/L		97	20 - 160	3	20
Bis(2-chloroethyl)ether	0.30	U	80.0	67.5		ug/L		84	70 - 130	3	20
N-Nitrosodi-n-propylamine	0.43	U	80.0	83.0		ug/L		104	70 - 130	7	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-163741-3 MSD | **Client Sample ID: RW-14S(135-155)-083118**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 549364 | **Prep Batch: 549338**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachloroethane	1.2	U	80.0	80.4		ug/L		101	20 - 160	5	20
Nitrobenzene	0.57	U	80.0	82.7		ug/L		103	70 - 130	8	20
Isophorone	0.80	U	80.0	84.8		ug/L		106	70 - 130	2	20
Naphthalene	1.1	U	80.0	82.4		ug/L		103	70 - 130	2	20
4-Chloroaniline	1.9	U	80.0	63.4		ug/L		79	20 - 160	0	20
Hexachlorobutadiene	0.78	U	80.0	96.5		ug/L		121	70 - 130	4	20
2-Methylnaphthalene	1.1	U	80.0	88.6		ug/L		111	70 - 130	4	20
Hexachlorocyclopentadiene	1.7	U	80.0	96.5		ug/L		121	20 - 160	2	20
2-Chloronaphthalene	1.2	U	80.0	80.7		ug/L		101	70 - 130	1	20
2-Nitroaniline	0.47	U	80.0	93.9		ug/L		117	20 - 160	3	20
Dimethyl phthalate	0.77	U	80.0	92.0		ug/L		115	70 - 130	5	20
Acenaphthylene	0.82	U	80.0	90.6		ug/L		113	70 - 130	2	20
2,6-Dinitrotoluene	0.39	U	80.0	92.9		ug/L		116	70 - 130	3	20
3-Nitroaniline	0.96	U	80.0	65.4		ug/L		82	20 - 160	2	20
Acenaphthene	1.1	U	80.0	77.5		ug/L		97	70 - 130	1	20
Dibenzofuran	1.1	U	80.0	88.6		ug/L		111	70 - 130	4	20
2,4-Dinitrophenol	14	U	160	152		ug/L		95	20 - 160	6	20
Diethyl phthalate	0.98	U	80.0	93.8		ug/L		117	70 - 130	5	20
4-Chlorophenyl phenyl ether	1.3	U	80.0	98.8		ug/L		123	70 - 130	4	20
Fluorene	0.91	U	80.0	93.9		ug/L		117	70 - 130	4	20
4-Nitroaniline	0.54	U	80.0	82.6		ug/L		103	20 - 160	2	20
N-Nitrosodiphenylamine	0.89	U	80.0	85.2		ug/L		106	70 - 130	1	20
4-Bromophenyl phenyl ether	0.75	U	80.0	89.7		ug/L		112	70 - 130	0	20
Hexachlorobenzene	0.40	U	80.0	94.6		ug/L		118	70 - 130	2	20
Phenanthrene	0.58	U	80.0	86.4		ug/L		108	70 - 130	0	20
Anthracene	0.63	U	80.0	86.3		ug/L		108	70 - 130	0	20
Carbazole	0.68	U	80.0	83.4		ug/L		104	70 - 130	2	20
Di-n-butyl phthalate	0.84	U	80.0	94.2		ug/L		118	70 - 130	0	20
Fluoranthene	0.84	U	80.0	92.7		ug/L		116	70 - 130	0	20
Pyrene	1.6	U	80.0	92.3		ug/L		115	70 - 130	8	20
Butyl benzyl phthalate	0.85	U	80.0	95.9		ug/L		120	70 - 130	7	20
Benzo[a]anthracene	0.59	U	80.0	89.6		ug/L		112	70 - 130	2	20
Chrysene	0.91	U	80.0	91.7		ug/L		115	70 - 130	3	20
Bis(2-ethylhexyl) phthalate	1.7	U	80.0	99.2		ug/L		124	70 - 130	5	20
Di-n-octyl phthalate	4.8	U F1 *	80.0	117	F1	ug/L		146	70 - 130	8	20
Benzo[b]fluoranthene	1.1	U	80.0	95.3		ug/L		119	70 - 130	1	20
Benzo[k]fluoranthene	0.67	U	80.0	94.7		ug/L		118	70 - 130	4	20
Benzo[a]pyrene	0.41	U	80.0	94.8		ug/L		119	70 - 130	4	20
Indeno[1,2,3-cd]pyrene	1.3	U	80.0	90.4		ug/L		113	70 - 130	5	20
Dibenz(a,h)anthracene	0.72	U	80.0	86.9		ug/L		109	70 - 130	2	20
Benzo[g,h,i]perylene	1.4	U	80.0	81.4		ug/L		102	70 - 130	2	20
1,1'-Biphenyl	1.2	U	80.0	82.5		ug/L		103	70 - 130	1	20
Acetophenone	0.79	U	80.0	86.4		ug/L		108	70 - 130	5	20
Benzaldehyde	0.59	U	160	164		ug/L		102	20 - 160	4	20
Caprolactam	0.68	U *	160	41.6		ug/L		26	20 - 160	5	20
Atrazine	1.3	U F1 *	160	215	E F1	ug/L		134	70 - 130	0	20
2,2'-oxybis[1-chloropropane]	0.63	U	80.0	63.6		ug/L		79	70 - 130	6	20
1,2,4,5-Tetrachlorobenzene	1.2	U	80.0	85.4		ug/L		107	70 - 130	0	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 460-163741-3 MSD
Matrix: Water
Analysis Batch: 549364

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA
Prep Batch: 549338

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,4,6-Tetrachlorophenol	0.75	U	80.0	89.1		ug/L		111	70 - 130	2	20
3,3'-Dichlorobenzidine	1.4	U	80.0	59.9		ug/L		75	70 - 130	3	20
Bis(2-chloroethoxy)methane	0.24	U	80.0	78.5		ug/L		98	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*103*		*30 - 130*
Phenol-d5 (Surr)	*27*		*15 - 110*
Terphenyl-d14 (Surr)	*92*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*132*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*41*		*15 - 110*
2-Fluorobiphenyl	*102*		*30 - 130*

Lab Sample ID: MB 460-549397/1-A
Matrix: Water
Analysis Batch: 549718

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549397

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/02/18 16:51	09/05/18 08:30	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/02/18 16:51	09/05/18 08:30	1
2-Methylphenol	0.26	U	10	0.26	ug/L		09/02/18 16:51	09/05/18 08:30	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/05/18 08:30	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/05/18 08:30	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/05/18 08:30	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/02/18 16:51	09/05/18 08:30	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/05/18 08:30	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/02/18 16:51	09/05/18 08:30	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/02/18 16:51	09/05/18 08:30	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/02/18 16:51	09/05/18 08:30	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/02/18 16:51	09/05/18 08:30	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/02/18 16:51	09/05/18 08:30	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		09/02/18 16:51	09/05/18 08:30	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		09/02/18 16:51	09/05/18 08:30	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/02/18 16:51	09/05/18 08:30	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/02/18 16:51	09/05/18 08:30	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/02/18 16:51	09/05/18 08:30	1
Isophorone	0.80	U	10	0.80	ug/L		09/02/18 16:51	09/05/18 08:30	1
Naphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/05/18 08:30	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/02/18 16:51	09/05/18 08:30	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		09/02/18 16:51	09/05/18 08:30	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/05/18 08:30	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/02/18 16:51	09/05/18 08:30	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/05/18 08:30	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/02/18 16:51	09/05/18 08:30	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/02/18 16:51	09/05/18 08:30	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/02/18 16:51	09/05/18 08:30	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/02/18 16:51	09/05/18 08:30	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/02/18 16:51	09/05/18 08:30	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/05/18 08:30	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-549397/1-A
Matrix: Water
Analysis Batch: 549718

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549397

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.1	U	10	1.1	ug/L		09/02/18 16:51	09/05/18 08:30	1
2,4-Dinitrophenol	14	U	20	14	ug/L		09/02/18 16:51	09/05/18 08:30	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/02/18 16:51	09/05/18 08:30	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/02/18 16:51	09/05/18 08:30	1
Fluorene	0.91	U	10	0.91	ug/L		09/02/18 16:51	09/05/18 08:30	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/02/18 16:51	09/05/18 08:30	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/02/18 16:51	09/05/18 08:30	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/05/18 08:30	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		09/02/18 16:51	09/05/18 08:30	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/02/18 16:51	09/05/18 08:30	1
Anthracene	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/05/18 08:30	1
Carbazole	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/05/18 08:30	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/05/18 08:30	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/02/18 16:51	09/05/18 08:30	1
Pyrene	1.6	U	10	1.6	ug/L		09/02/18 16:51	09/05/18 08:30	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/02/18 16:51	09/05/18 08:30	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		09/02/18 16:51	09/05/18 08:30	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/02/18 16:51	09/05/18 08:30	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/02/18 16:51	09/05/18 08:30	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/02/18 16:51	09/05/18 08:30	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		09/02/18 16:51	09/05/18 08:30	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/02/18 16:51	09/05/18 08:30	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		09/02/18 16:51	09/05/18 08:30	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		09/02/18 16:51	09/05/18 08:30	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		09/02/18 16:51	09/05/18 08:30	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/05/18 08:30	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/05/18 08:30	1
Acetophenone	0.79	U	10	0.79	ug/L		09/02/18 16:51	09/05/18 08:30	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/02/18 16:51	09/05/18 08:30	1
Caprolactam	0.68	U	10	0.68	ug/L		09/02/18 16:51	09/05/18 08:30	1
Atrazine	1.3	U	2.0	1.3	ug/L		09/02/18 16:51	09/05/18 08:30	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/02/18 16:51	09/05/18 08:30	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/02/18 16:51	09/05/18 08:30	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/02/18 16:51	09/05/18 08:30	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/02/18 16:51	09/05/18 08:30	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/02/18 16:51	09/05/18 08:30	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*09/02/18 16:51*	*09/05/18 08:30*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*89*		*30 - 130*	*09/02/18 16:51*	*09/05/18 08:30*	*1*
Phenol-d5 (Surr)	*40*		*15 - 110*	*09/02/18 16:51*	*09/05/18 08:30*	*1*
Terphenyl-d14 (Surr)	*96*		*30 - 130*	*09/02/18 16:51*	*09/05/18 08:30*	*1*
2,4,6-Tribromophenol (Surr)	*93*		*15 - 110*	*09/02/18 16:51*	*09/05/18 08:30*	*1*
2-Fluorophenol (Surr)	*55*		*15 - 110*	*09/02/18 16:51*	*09/05/18 08:30*	*1*
2-Fluorobiphenyl	*75*		*30 - 130*	*09/02/18 16:51*	*09/05/18 08:30*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-549397/2-A
Matrix: Water
Analysis Batch: 549718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549397

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	80.0	37.1		ug/L		46	20 - 160
2-Chlorophenol	80.0	67.7		ug/L		85	70 - 130
2-Methylphenol	80.0	59.3		ug/L		74	70 - 130
4-Methylphenol	80.0	52.6		ug/L		66	20 - 160
2-Nitrophenol	80.0	96.1		ug/L		120	70 - 130
2,4-Dimethylphenol	80.0	71.5		ug/L		89	70 - 130
2,4-Dichlorophenol	80.0	76.8		ug/L		96	70 - 130
4-Chloro-3-methylphenol	80.0	73.1		ug/L		91	20 - 160
2,4,6-Trichlorophenol	80.0	82.5		ug/L		103	70 - 130
2,4,5-Trichlorophenol	80.0	78.6		ug/L		98	20 - 160
2,4-Dinitrotoluene	80.0	85.9		ug/L		107	70 - 130
4-Nitrophenol	160	71.7		ug/L		45	20 - 160
4,6-Dinitro-2-methylphenol	160	240		ug/L		150	20 - 160
Pentachlorophenol	160	161		ug/L		101	20 - 160
Bis(2-chloroethyl)ether	80.0	73.8		ug/L		92	70 - 130
N-Nitrosodi-n-propylamine	80.0	71.8		ug/L		90	70 - 130
Hexachloroethane	80.0	49.3		ug/L		62	20 - 160
Nitrobenzene	80.0	80.3		ug/L		100	70 - 130
Isophorone	80.0	78.1		ug/L		98	70 - 130
Naphthalene	80.0	63.6		ug/L		80	70 - 130
4-Chloroaniline	80.0	73.4		ug/L		92	20 - 160
Hexachlorobutadiene	80.0	50.0	*	ug/L		63	70 - 130
2-Methylnaphthalene	80.0	65.5		ug/L		82	70 - 130
Hexachlorocyclopentadiene	80.0	65.0		ug/L		81	20 - 160
2-Chloronaphthalene	80.0	67.0		ug/L		84	70 - 130
2-Nitroaniline	80.0	70.3		ug/L		88	20 - 160
Dimethyl phthalate	80.0	76.7		ug/L		96	70 - 130
Acenaphthylene	80.0	78.2		ug/L		98	70 - 130
2,6-Dinitrotoluene	80.0	88.2		ug/L		110	70 - 130
3-Nitroaniline	80.0	81.7		ug/L		102	20 - 160
Acenaphthene	80.0	69.8		ug/L		87	70 - 130
Dibenzofuran	80.0	72.3		ug/L		90	70 - 130
2,4-Dinitrophenol	160	262	*	ug/L		164	20 - 160
Diethyl phthalate	80.0	80.2		ug/L		100	70 - 130
4-Chlorophenyl phenyl ether	80.0	73.9		ug/L		92	70 - 130
Fluorene	80.0	74.9		ug/L		94	70 - 130
4-Nitroaniline	80.0	82.5		ug/L		103	20 - 160
N-Nitrosodiphenylamine	80.0	73.5		ug/L		92	70 - 130
4-Bromophenyl phenyl ether	80.0	70.5		ug/L		88	70 - 130
Hexachlorobenzene	80.0	71.2		ug/L		89	70 - 130
Phenanthrene	80.0	74.5		ug/L		93	70 - 130
Anthracene	80.0	75.6		ug/L		94	70 - 130
Carbazole	80.0	76.8		ug/L		96	70 - 130
Di-n-butyl phthalate	80.0	86.0		ug/L		108	70 - 130
Fluoranthene	80.0	80.5		ug/L		101	70 - 130
Pyrene	80.0	88.2		ug/L		110	70 - 130
Butyl benzyl phthalate	80.0	97.7		ug/L		122	70 - 130
Benzo[a]anthracene	80.0	80.8		ug/L		101	70 - 130

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-549397/2-A
Matrix: Water
Analysis Batch: 549718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549397

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	80.0	79.1		ug/L		99	70 - 130
Bis(2-ethylhexyl) phthalate	80.0	93.2		ug/L		117	70 - 130
Di-n-octyl phthalate	80.0	90.4		ug/L		113	70 - 130
Benzo[b]fluoranthene	80.0	85.1		ug/L		106	70 - 130
Benzo[k]fluoranthene	80.0	81.1		ug/L		101	70 - 130
Benzo[a]pyrene	80.0	84.9		ug/L		106	70 - 130
Indeno[1,2,3-cd]pyrene	80.0	76.7		ug/L		96	70 - 130
Dibenz(a,h)anthracene	80.0	77.6		ug/L		97	70 - 130
Benzo[g,h,i]perylene	80.0	76.0		ug/L		95	70 - 130
1,1'-Biphenyl	80.0	66.4		ug/L		83	70 - 130
Acetophenone	80.0	72.6		ug/L		91	70 - 130
2,2'-oxybis[1-chloropropane]	80.0	68.6		ug/L		86	70 - 130
1,2,4,5-Tetrachlorobenzene	80.0	61.7		ug/L		77	70 - 130
2,3,4,6-Tetrachlorophenol	80.0	91.2		ug/L		114	70 - 130
3,3'-Dichlorobenzidine	80.0	76.1		ug/L		95	70 - 130
Bis(2-chloroethoxy)methane	80.0	77.5		ug/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*96*		*30 - 130*
Phenol-d5 (Surr)	*39*		*15 - 110*
Terphenyl-d14 (Surr)	*101*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*104*		*15 - 110*
2-Fluorophenol (Surr)	*54*		*15 - 110*
2-Fluorobiphenyl	*85*		*30 - 130*

Lab Sample ID: LCS 460-549397/4-A
Matrix: Water
Analysis Batch: 549470

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549397

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	160	188		ug/L		117	20 - 160
Caprolactam	160	64.0		ug/L		40	20 - 160
Atrazine	160	213	*	ug/L		133	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*117*		*30 - 130*
Phenol-d5 (Surr)	*48*		*15 - 110*
Terphenyl-d14 (Surr)	*117*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*110*		*15 - 110*
2-Fluorophenol (Surr)	*69*		*15 - 110*
2-Fluorobiphenyl	*97*		*30 - 130*

Lab Sample ID: LCSD 460-549397/3-A
Matrix: Water
Analysis Batch: 549718

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 549397

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	80.0	39.8		ug/L		50	20 - 160	7	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-549397/3-A
Matrix: Water
Analysis Batch: 549718

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 549397

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chlorophenol	80.0	70.0		ug/L		87	70 - 130	3	20
2-Methylphenol	80.0	62.0		ug/L		77	70 - 130	4	20
4-Methylphenol	80.0	54.3		ug/L		68	20 - 160	3	20
2-Nitrophenol	80.0	97.4		ug/L		122	70 - 130	1	20
2,4-Dimethylphenol	80.0	72.9		ug/L		91	70 - 130	2	20
2,4-Dichlorophenol	80.0	78.4		ug/L		98	70 - 130	2	20
4-Chloro-3-methylphenol	80.0	74.8		ug/L		93	20 - 160	2	20
2,4,6-Trichlorophenol	80.0	83.2		ug/L		104	70 - 130	1	20
2,4,5-Trichlorophenol	80.0	80.7		ug/L		101	20 - 160	3	20
2,4-Dinitrotoluene	80.0	88.1		ug/L		110	70 - 130	2	20
4-Nitrophenol	160	78.6		ug/L		49	20 - 160	9	20
4,6-Dinitro-2-methylphenol	160	251		ug/L		157	20 - 160	4	20
Pentachlorophenol	160	167		ug/L		104	20 - 160	3	20
Bis(2-chloroethyl)ether	80.0	74.0		ug/L		93	70 - 130	0	20
N-Nitrosodi-n-propylamine	80.0	71.8		ug/L		90	70 - 130	0	20
Hexachloroethane	80.0	48.1		ug/L		60	20 - 160	2	20
Nitrobenzene	80.0	82.5		ug/L		103	70 - 130	3	20
Isophorone	80.0	78.8		ug/L		99	70 - 130	1	20
Naphthalene	80.0	63.1		ug/L		79	70 - 130	1	20
4-Chloroaniline	80.0	68.1		ug/L		85	20 - 160	8	20
Hexachlorobutadiene	80.0	49.0	*	ug/L		61	70 - 130	2	20
2-Methylnaphthalene	80.0	65.8		ug/L		82	70 - 130	0	20
Hexachlorocyclopentadiene	80.0	66.0		ug/L		83	20 - 160	2	20
2-Chloronaphthalene	80.0	67.6		ug/L		85	70 - 130	1	20
2-Nitroaniline	80.0	77.6		ug/L		97	20 - 160	10	20
Dimethyl phthalate	80.0	77.7		ug/L		97	70 - 130	1	20
Acenaphthylene	80.0	78.3		ug/L		98	70 - 130	0	20
2,6-Dinitrotoluene	80.0	88.4		ug/L		110	70 - 130	0	20
3-Nitroaniline	80.0	79.7		ug/L		100	20 - 160	2	20
Acenaphthene	80.0	71.0		ug/L		89	70 - 130	2	20
Dibenzofuran	80.0	73.3		ug/L		92	70 - 130	1	20
2,4-Dinitrophenol	160	274	*	ug/L		171	20 - 160	5	20
Diethyl phthalate	80.0	82.0		ug/L		102	70 - 130	2	20
4-Chlorophenyl phenyl ether	80.0	74.4		ug/L		93	70 - 130	1	20
Fluorene	80.0	75.8		ug/L		95	70 - 130	1	20
4-Nitroaniline	80.0	82.5		ug/L		103	20 - 160	0	20
N-Nitrosodiphenylamine	80.0	73.5		ug/L		92	70 - 130	0	20
4-Bromophenyl phenyl ether	80.0	72.7		ug/L		91	70 - 130	3	20
Hexachlorobenzene	80.0	73.3		ug/L		92	70 - 130	3	20
Phenanthrene	80.0	76.0		ug/L		95	70 - 130	2	20
Anthracene	80.0	77.7		ug/L		97	70 - 130	3	20
Carbazole	80.0	78.2		ug/L		98	70 - 130	2	20
Di-n-butyl phthalate	80.0	88.1		ug/L		110	70 - 130	2	20
Fluoranthene	80.0	82.3		ug/L		103	70 - 130	2	20
Pyrene	80.0	90.0		ug/L		113	70 - 130	2	20
Butyl benzyl phthalate	80.0	100		ug/L		125	70 - 130	2	20
Benzo[a]anthracene	80.0	82.8		ug/L		103	70 - 130	3	20
Chrysene	80.0	80.9		ug/L		101	70 - 130	2	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-549397/3-A
Matrix: Water
Analysis Batch: 549718

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 549397

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate			80.0	94.9		ug/L		119	70 - 130	2	20
Di-n-octyl phthalate			80.0	90.1		ug/L		113	70 - 130	0	20
Benzo[b]fluoranthene			80.0	88.2		ug/L		110	70 - 130	4	20
Benzo[k]fluoranthene			80.0	83.5		ug/L		104	70 - 130	3	20
Benzo[a]pyrene			80.0	87.2		ug/L		109	70 - 130	3	20
Indeno[1,2,3-cd]pyrene			80.0	79.0		ug/L		99	70 - 130	3	20
Dibenz(a,h)anthracene			80.0	79.7		ug/L		100	70 - 130	3	20
Benzo[g,h,i]perylene			80.0	79.0		ug/L		99	70 - 130	4	20
1,1'-Biphenyl			80.0	67.0		ug/L		84	70 - 130	1	20
Acetophenone			80.0	73.3		ug/L		92	70 - 130	1	20
2,2'-oxybis[1-chloropropane]			80.0	68.9		ug/L		86	70 - 130	0	20
1,2,4,5-Tetrachlorobenzene			80.0	63.3		ug/L		79	70 - 130	3	20
2,3,4,6-Tetrachlorophenol			80.0	93.0		ug/L		116	70 - 130	2	20
3,3'-Dichlorobenzidine			80.0	73.9		ug/L		92	70 - 130	3	20
Bis(2-chloroethoxy)methane			80.0	78.2		ug/L		98	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*94*		*30 - 130*
Phenol-d5 (Surr)	*42*		*15 - 110*
Terphenyl-d14 (Surr)	*102*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*103*		*15 - 110*
2-Fluorophenol (Surr)	*58*		*15 - 110*
2-Fluorobiphenyl	*83*		*30 - 130*

Lab Sample ID: LCSD 460-549397/5-A
Matrix: Water
Analysis Batch: 549470

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 549397

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzaldehyde			160	185		ug/L		116	20 - 160	2	20
Caprolactam			160	52.2		ug/L		33	20 - 160	20	20
Atrazine			160	190		ug/L		119	70 - 130	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*120*		*30 - 130*
Phenol-d5 (Surr)	*49*		*15 - 110*
Terphenyl-d14 (Surr)	*120*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*114*	*X*	*15 - 110*
2-Fluorophenol (Surr)	*69*		*15 - 110*
2-Fluorobiphenyl	*102*		*30 - 130*

Lab Sample ID: MB 460-549791/1-A
Matrix: Water
Analysis Batch: 549905

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549791

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U	10	0.29	ug/L		09/05/18 10:46	09/05/18 22:36	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		09/05/18 10:46	09/05/18 22:36	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-549791/1-A
Matrix: Water
Analysis Batch: 549905

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549791

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	0.26	U	10	0.26	ug/L		09/05/18 10:46	09/05/18 22:36	1
4-Methylphenol	0.24	U	10	0.24	ug/L		09/05/18 10:46	09/05/18 22:36	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		09/05/18 10:46	09/05/18 22:36	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		09/05/18 10:46	09/05/18 22:36	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		09/05/18 10:46	09/05/18 22:36	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		09/05/18 10:46	09/05/18 22:36	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		09/05/18 10:46	09/05/18 22:36	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		09/05/18 10:46	09/05/18 22:36	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		09/05/18 10:46	09/05/18 22:36	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		09/05/18 10:46	09/05/18 22:36	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		09/05/18 10:46	09/05/18 22:36	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		09/05/18 10:46	09/05/18 22:36	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		09/05/18 10:46	09/05/18 22:36	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		09/05/18 10:46	09/05/18 22:36	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		09/05/18 10:46	09/05/18 22:36	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		09/05/18 10:46	09/05/18 22:36	1
Isophorone	0.80	U	10	0.80	ug/L		09/05/18 10:46	09/05/18 22:36	1
Naphthalene	1.1	U	10	1.1	ug/L		09/05/18 10:46	09/05/18 22:36	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		09/05/18 10:46	09/05/18 22:36	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		09/05/18 10:46	09/05/18 22:36	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		09/05/18 10:46	09/05/18 22:36	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		09/05/18 10:46	09/05/18 22:36	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		09/05/18 10:46	09/05/18 22:36	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		09/05/18 10:46	09/05/18 22:36	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		09/05/18 10:46	09/05/18 22:36	1
Acenaphthylene	0.82	U	10	0.82	ug/L		09/05/18 10:46	09/05/18 22:36	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		09/05/18 10:46	09/05/18 22:36	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		09/05/18 10:46	09/05/18 22:36	1
Acenaphthene	1.1	U	10	1.1	ug/L		09/05/18 10:46	09/05/18 22:36	1
Dibenzofuran	1.1	U	10	1.1	ug/L		09/05/18 10:46	09/05/18 22:36	1
2,4-Dinitrophenol	14	U	20	14	ug/L		09/05/18 10:46	09/05/18 22:36	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		09/05/18 10:46	09/05/18 22:36	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		09/05/18 10:46	09/05/18 22:36	1
Fluorene	0.91	U	10	0.91	ug/L		09/05/18 10:46	09/05/18 22:36	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		09/05/18 10:46	09/05/18 22:36	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		09/05/18 10:46	09/05/18 22:36	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		09/05/18 10:46	09/05/18 22:36	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		09/05/18 10:46	09/05/18 22:36	1
Phenanthrene	0.58	U	10	0.58	ug/L		09/05/18 10:46	09/05/18 22:36	1
Anthracene	0.63	U	10	0.63	ug/L		09/05/18 10:46	09/05/18 22:36	1
Carbazole	0.68	U	10	0.68	ug/L		09/05/18 10:46	09/05/18 22:36	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		09/05/18 10:46	09/05/18 22:36	1
Fluoranthene	0.84	U	10	0.84	ug/L		09/05/18 10:46	09/05/18 22:36	1
Pyrene	1.6	U	10	1.6	ug/L		09/05/18 10:46	09/05/18 22:36	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		09/05/18 10:46	09/05/18 22:36	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		09/05/18 10:46	09/05/18 22:36	1
Chrysene	0.91	U	2.0	0.91	ug/L		09/05/18 10:46	09/05/18 22:36	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		09/05/18 10:46	09/05/18 22:36	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-549791/1-A
Matrix: Water
Analysis Batch: 549905

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549791

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		09/05/18 10:46	09/05/18 22:36	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		09/05/18 10:46	09/05/18 22:36	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		09/05/18 10:46	09/05/18 22:36	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		09/05/18 10:46	09/05/18 22:36	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		09/05/18 10:46	09/05/18 22:36	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		09/05/18 10:46	09/05/18 22:36	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		09/05/18 10:46	09/05/18 22:36	1
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		09/05/18 10:46	09/05/18 22:36	1
Acetophenone	0.79	U	10	0.79	ug/L		09/05/18 10:46	09/05/18 22:36	1
Benzaldehyde	0.59	U	10	0.59	ug/L		09/05/18 10:46	09/05/18 22:36	1
Caprolactam	0.68	U	10	0.68	ug/L		09/05/18 10:46	09/05/18 22:36	1
Atrazine	1.3	U	2.0	1.3	ug/L		09/05/18 10:46	09/05/18 22:36	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		09/05/18 10:46	09/05/18 22:36	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		09/05/18 10:46	09/05/18 22:36	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		09/05/18 10:46	09/05/18 22:36	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		09/05/18 10:46	09/05/18 22:36	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		09/05/18 10:46	09/05/18 22:36	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*09/05/18 10:46*	*09/05/18 22:36*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*95*		*30 - 130*	*09/05/18 10:46*	*09/05/18 22:36*	*1*
Phenol-d5 (Surr)	*30*		*15 - 110*	*09/05/18 10:46*	*09/05/18 22:36*	*1*
Terphenyl-d14 (Surr)	*105*		*30 - 130*	*09/05/18 10:46*	*09/05/18 22:36*	*1*
2,4,6-Tribromophenol (Surr)	*105*		*15 - 110*	*09/05/18 10:46*	*09/05/18 22:36*	*1*
2-Fluorophenol (Surr)	*47*		*15 - 110*	*09/05/18 10:46*	*09/05/18 22:36*	*1*
2-Fluorobiphenyl	*96*		*30 - 130*	*09/05/18 10:46*	*09/05/18 22:36*	*1*

Lab Sample ID: LCS 460-549791/2-A
Matrix: Water
Analysis Batch: 549905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	80.0	23.5		ug/L		29	20 - 160
2-Chlorophenol	80.0	56.3		ug/L		70	70 - 130
2-Methylphenol	80.0	44.8	*	ug/L		56	70 - 130
4-Methylphenol	80.0	41.9		ug/L		52	20 - 160
2-Nitrophenol	80.0	71.6		ug/L		89	70 - 130
2,4-Dimethylphenol	80.0	59.9		ug/L		75	70 - 130
2,4-Dichlorophenol	80.0	66.4		ug/L		83	70 - 130
4-Chloro-3-methylphenol	80.0	59.4		ug/L		74	20 - 160
2,4,6-Trichlorophenol	80.0	70.7		ug/L		88	70 - 130
2,4,5-Trichlorophenol	80.0	69.2		ug/L		86	20 - 160
2,4-Dinitrotoluene	80.0	70.4		ug/L		88	70 - 130
4-Nitrophenol	160	39.6		ug/L		25	20 - 160
4,6-Dinitro-2-methylphenol	160	158		ug/L		99	20 - 160

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-549791/2-A
Matrix: Water
Analysis Batch: 549905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	160	142		ug/L		89	20 - 160
Bis(2-chloroethyl)ether	80.0	59.5		ug/L		74	70 - 130
N-Nitrosodi-n-propylamine	80.0	57.6		ug/L		72	70 - 130
Hexachloroethane	80.0	57.6		ug/L		72	20 - 160
Nitrobenzene	80.0	63.2		ug/L		79	70 - 130
Isophorone	80.0	64.0		ug/L		80	70 - 130
Naphthalene	80.0	65.1		ug/L		81	70 - 130
4-Chloroaniline	80.0	34.4		ug/L		43	20 - 160
Hexachlorobutadiene	80.0	68.3		ug/L		85	70 - 130
2-Methylnaphthalene	80.0	65.7		ug/L		82	70 - 130
Hexachlorocyclopentadiene	80.0	60.2		ug/L		75	20 - 160
2-Chloronaphthalene	80.0	67.0		ug/L		84	70 - 130
2-Nitroaniline	80.0	60.7		ug/L		76	20 - 160
Dimethyl phthalate	80.0	66.9		ug/L		84	70 - 130
Acenaphthylene	80.0	71.2		ug/L		89	70 - 130
2,6-Dinitrotoluene	80.0	69.8		ug/L		87	70 - 130
3-Nitroaniline	80.0	50.4		ug/L		63	20 - 160
Acenaphthene	80.0	60.4		ug/L		76	70 - 130
Dibenzofuran	80.0	66.4		ug/L		83	70 - 130
2,4-Dinitrophenol	160	131		ug/L		82	20 - 160
Diethyl phthalate	80.0	66.5		ug/L		83	70 - 130
4-Chlorophenyl phenyl ether	80.0	68.5		ug/L		86	70 - 130
Fluorene	80.0	66.0		ug/L		82	70 - 130
4-Nitroaniline	80.0	55.5		ug/L		69	20 - 160
N-Nitrosodiphenylamine	80.0	70.7		ug/L		88	70 - 130
4-Bromophenyl phenyl ether	80.0	74.9		ug/L		94	70 - 130
Hexachlorobenzene	80.0	74.1		ug/L		93	70 - 130
Phenanthrene	80.0	69.1		ug/L		86	70 - 130
Anthracene	80.0	68.5		ug/L		86	70 - 130
Carbazole	80.0	69.3		ug/L		87	70 - 130
Di-n-butyl phthalate	80.0	73.1		ug/L		91	70 - 130
Fluoranthene	80.0	71.7		ug/L		90	70 - 130
Pyrene	80.0	71.9		ug/L		90	70 - 130
Butyl benzyl phthalate	80.0	73.2		ug/L		92	70 - 130
Benzo[a]anthracene	80.0	72.9		ug/L		91	70 - 130
Chrysene	80.0	72.1		ug/L		90	70 - 130
Bis(2-ethylhexyl) phthalate	80.0	70.6		ug/L		88	70 - 130
Di-n-octyl phthalate	80.0	69.7		ug/L		87	70 - 130
Benzo[b]fluoranthene	80.0	72.9		ug/L		91	70 - 130
Benzo[k]fluoranthene	80.0	77.7		ug/L		97	70 - 130
Benzo[a]pyrene	80.0	72.9		ug/L		91	70 - 130
Indeno[1,2,3-cd]pyrene	80.0	77.2		ug/L		97	70 - 130
Dibenz(a,h)anthracene	80.0	79.5		ug/L		99	70 - 130
Benzo[g,h,i]perylene	80.0	75.3		ug/L		94	70 - 130
1,1'-Biphenyl	80.0	66.7		ug/L		83	70 - 130
Acetophenone	80.0	61.1		ug/L		76	70 - 130
2,2'-oxybis[1-chloropropane]	80.0	48.7	*	ug/L		61	70 - 130
1,2,4,5-Tetrachlorobenzene	80.0	70.3		ug/L		88	70 - 130

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-549791/2-A
Matrix: Water
Analysis Batch: 549905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,4,6-Tetrachlorophenol	80.0	71.1		ug/L		89	70 - 130
3,3'-Dichlorobenzidine	80.0	50.0	*	ug/L		63	70 - 130
Bis(2-chloroethoxy)methane	80.0	64.5		ug/L		81	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*80*		*30 - 130*
Phenol-d5 (Surr)	*26*		*15 - 110*
Terphenyl-d14 (Surr)	*85*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*96*		*15 - 110*
2-Fluorophenol (Surr)	*41*		*15 - 110*
2-Fluorobiphenyl	*84*		*30 - 130*

Lab Sample ID: LCS 460-549791/4-A
Matrix: Water
Analysis Batch: 549905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzaldehyde	160	138		ug/L		86	20 - 160
Caprolactam	160	34.1		ug/L		21	20 - 160
Atrazine	160	164		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*83*		*30 - 130*
Phenol-d5 (Surr)	*23*		*15 - 110*
Terphenyl-d14 (Surr)	*93*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*88*		*15 - 110*
2-Fluorophenol (Surr)	*38*		*15 - 110*
2-Fluorobiphenyl	*83*		*30 - 130*

Lab Sample ID: LCSD 460-549791/3-A
Matrix: Water
Analysis Batch: 549905

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 549791

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	80.0	23.3		ug/L		29	20 - 160	1	20
2-Chlorophenol	80.0	59.0		ug/L		74	70 - 130	5	20
2-Methylphenol	80.0	46.3	*	ug/L		58	70 - 130	3	20
4-Methylphenol	80.0	43.9		ug/L		55	20 - 160	5	20
2-Nitrophenol	80.0	74.1		ug/L		93	70 - 130	3	20
2,4-Dimethylphenol	80.0	64.5		ug/L		81	70 - 130	7	20
2,4-Dichlorophenol	80.0	69.6		ug/L		87	70 - 130	5	20
4-Chloro-3-methylphenol	80.0	62.8		ug/L		79	20 - 160	6	20
2,4,6-Trichlorophenol	80.0	74.7		ug/L		93	70 - 130	5	20
2,4,5-Trichlorophenol	80.0	71.5		ug/L		89	20 - 160	3	20
2,4-Dinitrotoluene	80.0	75.4		ug/L		94	70 - 130	7	20
4-Nitrophenol	160	43.5		ug/L		27	20 - 160	9	20
4,6-Dinitro-2-methylphenol	160	168		ug/L		105	20 - 160	6	20
Pentachlorophenol	160	148		ug/L		92	20 - 160	4	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-549791/3-A
Matrix: Water
Analysis Batch: 549905

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 549791

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	80.0	61.3		ug/L		77	70 - 130	3	20
N-Nitrosodi-n-propylamine	80.0	61.2		ug/L		76	70 - 130	6	20
Hexachloroethane	80.0	59.1		ug/L		74	20 - 160	3	20
Nitrobenzene	80.0	66.2		ug/L		83	70 - 130	5	20
Isophorone	80.0	68.7		ug/L		86	70 - 130	7	20
Naphthalene	80.0	67.8		ug/L		85	70 - 130	4	20
4-Chloroaniline	80.0	38.4		ug/L		48	20 - 160	11	20
Hexachlorobutadiene	80.0	69.8		ug/L		87	70 - 130	2	20
2-Methylnaphthalene	80.0	69.3		ug/L		87	70 - 130	5	20
Hexachlorocyclopentadiene	80.0	61.1		ug/L		76	20 - 160	2	20
2-Chloronaphthalene	80.0	69.8		ug/L		87	70 - 130	4	20
2-Nitroaniline	80.0	64.8		ug/L		81	20 - 160	6	20
Dimethyl phthalate	80.0	72.1		ug/L		90	70 - 130	7	20
Acenaphthylene	80.0	76.0		ug/L		95	70 - 130	7	20
2,6-Dinitrotoluene	80.0	73.9		ug/L		92	70 - 130	6	20
3-Nitroaniline	80.0	59.0		ug/L		74	20 - 160	16	20
Acenaphthene	80.0	64.5		ug/L		81	70 - 130	7	20
Dibenzofuran	80.0	70.9		ug/L		89	70 - 130	7	20
2,4-Dinitrophenol	160	139		ug/L		87	20 - 160	6	20
Diethyl phthalate	80.0	71.0		ug/L		89	70 - 130	7	20
4-Chlorophenyl phenyl ether	80.0	73.1		ug/L		91	70 - 130	6	20
Fluorene	80.0	70.7		ug/L		88	70 - 130	7	20
4-Nitroaniline	80.0	65.7		ug/L		82	20 - 160	17	20
N-Nitrosodiphenylamine	80.0	74.7		ug/L		93	70 - 130	5	20
4-Bromophenyl phenyl ether	80.0	80.4		ug/L		100	70 - 130	7	20
Hexachlorobenzene	80.0	79.8		ug/L		100	70 - 130	7	20
Phenanthrene	80.0	73.5		ug/L		92	70 - 130	6	20
Anthracene	80.0	73.7		ug/L		92	70 - 130	7	20
Carbazole	80.0	73.6		ug/L		92	70 - 130	6	20
Di-n-butyl phthalate	80.0	77.1		ug/L		96	70 - 130	5	20
Fluoranthene	80.0	75.9		ug/L		95	70 - 130	6	20
Pyrene	80.0	77.5		ug/L		97	70 - 130	7	20
Butyl benzyl phthalate	80.0	77.5		ug/L		97	70 - 130	6	20
Benzo[a]anthracene	80.0	77.5		ug/L		97	70 - 130	6	20
Chrysene	80.0	77.2		ug/L		97	70 - 130	7	20
Bis(2-ethylhexyl) phthalate	80.0	76.1		ug/L		95	70 - 130	7	20
Di-n-octyl phthalate	80.0	75.4		ug/L		94	70 - 130	8	20
Benzo[b]fluoranthene	80.0	79.0		ug/L		99	70 - 130	8	20
Benzo[k]fluoranthene	80.0	79.6		ug/L		100	70 - 130	2	20
Benzo[a]pyrene	80.0	78.2		ug/L		98	70 - 130	7	20
Indeno[1,2,3-cd]pyrene	80.0	83.0		ug/L		104	70 - 130	7	20
Dibenz(a,h)anthracene	80.0	85.4		ug/L		107	70 - 130	7	20
Benzo[g,h,i]perylene	80.0	80.6		ug/L		101	70 - 130	7	20
1,1'-Biphenyl	80.0	70.4		ug/L		88	70 - 130	5	20
Acetophenone	80.0	64.6		ug/L		81	70 - 130	6	20
2,2'-oxybis[1-chloropropane]	80.0	51.6	*	ug/L		65	70 - 130	6	20
1,2,4,5-Tetrachlorobenzene	80.0	72.5		ug/L		91	70 - 130	3	20
2,3,4,6-Tetrachlorophenol	80.0	74.8		ug/L		94	70 - 130	5	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-549791/3-A
Matrix: Water
Analysis Batch: 549905

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 549791

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			80.0	56.2		ug/L		70	70 - 130	12	20
Bis(2-chloroethoxy)methane			80.0	68.0		ug/L		85	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*83*		*30 - 130*
Phenol-d5 (Surr)	*27*		*15 - 110*
Terphenyl-d14 (Surr)	*90*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*99*		*15 - 110*
2-Fluorophenol (Surr)	*42*		*15 - 110*
2-Fluorobiphenyl	*86*		*30 - 130*

Lab Sample ID: LCSD 460-549791/5-A
Matrix: Water
Analysis Batch: 549905

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 549791

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzaldehyde			160	132		ug/L		83	20 - 160	4	20
Caprolactam			160	31.2		ug/L		20	20 - 160	9	20
Atrazine			160	160		ug/L		100	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*84*		*30 - 130*
Phenol-d5 (Surr)	*26*		*15 - 110*
Terphenyl-d14 (Surr)	*94*		*30 - 130*
2,4,6-Tribromophenol (Surr)	*90*		*15 - 110*
2-Fluorophenol (Surr)	*42*		*15 - 110*
2-Fluorobiphenyl	*86*		*30 - 130*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 460-549338/1-A
Matrix: Water
Analysis Batch: 549391

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549338

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 06:57	09/02/18 17:50	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 06:57	09/02/18 17:50	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 06:57	09/02/18 17:50	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		09/02/18 06:57	09/02/18 17:50	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		09/02/18 06:57	09/02/18 17:50	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		09/02/18 06:57	09/02/18 17:50	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		09/02/18 06:57	09/02/18 17:50	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 06:57	09/02/18 17:50	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		09/02/18 06:57	09/02/18 17:50	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 460-549338/4-A
Matrix: Water
Analysis Batch: 549391

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549338

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.899		ug/L		112	70 - 130
Benzo[a]pyrene	0.800	0.917		ug/L		115	70 - 130
Benzo[b]fluoranthene	0.800	0.858		ug/L		107	70 - 130
Bis(2-chloroethyl)ether	0.800	0.950		ug/L		119	70 - 130
Dibenz(a,h)anthracene	0.800	1.09	*	ug/L		137	70 - 130
Hexachlorobenzene	0.800	1.16	*	ug/L		145	70 - 130
Indeno[1,2,3-cd]pyrene	0.800	1.13	*	ug/L		141	70 - 130
N-Nitrosodimethylamine	0.800	0.621		ug/L		78	20 - 160
Pentachlorophenol	1.60	2.88	*	ug/L		180	20 - 160

Lab Sample ID: LCSD 460-549338/5-A
Matrix: Water
Analysis Batch: 549391

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 549338

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.918		ug/L		115	70 - 130	2	20
Benzo[a]pyrene	0.800	0.971		ug/L		121	70 - 130	6	20
Benzo[b]fluoranthene	0.800	0.903		ug/L		113	70 - 130	5	20
Bis(2-chloroethyl)ether	0.800	0.977		ug/L		122	70 - 130	3	20
Dibenz(a,h)anthracene	0.800	1.01		ug/L		127	70 - 130	8	20
Hexachlorobenzene	0.800	1.12	*	ug/L		140	70 - 130	3	20
Indeno[1,2,3-cd]pyrene	0.800	1.16	*	ug/L		145	70 - 130	3	20
N-Nitrosodimethylamine	0.800	0.650		ug/L		81	20 - 160	5	20
Pentachlorophenol	1.60	2.75	*	ug/L		172	20 - 160	4	20

Lab Sample ID: MB 460-549397/1-A
Matrix: Water
Analysis Batch: 549462

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549397

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.016	U	0.050	0.016	ug/L		09/02/18 16:51	09/04/18 13:18	1
Benzo[a]pyrene	0.022	U	0.050	0.022	ug/L		09/02/18 16:51	09/04/18 13:18	1
Benzo[b]fluoranthene	0.024	U	0.050	0.024	ug/L		09/02/18 16:51	09/04/18 13:18	1
Bis(2-chloroethyl)ether	0.026	U	0.030	0.026	ug/L		09/02/18 16:51	09/04/18 13:18	1
Dibenz(a,h)anthracene	0.011	U	0.050	0.011	ug/L		09/02/18 16:51	09/04/18 13:18	1
Hexachlorobenzene	0.013	U	0.020	0.013	ug/L		09/02/18 16:51	09/04/18 13:18	1
Indeno[1,2,3-cd]pyrene	0.036	U	0.050	0.036	ug/L		09/02/18 16:51	09/04/18 13:18	1
N-Nitrosodimethylamine	0.12	U	0.20	0.12	ug/L		09/02/18 16:51	09/04/18 13:18	1
Pentachlorophenol	0.15	U	0.20	0.15	ug/L		09/02/18 16:51	09/04/18 13:18	1

Lab Sample ID: LCS 460-549397/6-A
Matrix: Water
Analysis Batch: 549462

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549397

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	0.800	0.952		ug/L		119	70 - 130
Benzo[a]pyrene	0.800	0.977		ug/L		122	70 - 130
Benzo[b]fluoranthene	0.800	1.02		ug/L		128	70 - 130
Bis(2-chloroethyl)ether	0.800	1.06	*	ug/L		133	70 - 130

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 460-549397/6-A
Matrix: Water
Analysis Batch: 549462

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549397

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz(a,h)anthracene	0.800	1.04		ug/L		130	70 - 130
Hexachlorobenzene	0.800	1.03		ug/L		129	70 - 130
Indeno[1,2,3-cd]pyrene	0.800	0.938		ug/L		117	70 - 130
N-Nitrosodimethylamine	0.800	0.761		ug/L		95	20 - 160
Pentachlorophenol	1.60	2.36		ug/L		148	20 - 160

Lab Sample ID: LCSD 460-549397/7-A
Matrix: Water
Analysis Batch: 549462

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 549397

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	0.800	0.933		ug/L		117	70 - 130	2	20
Benzo[a]pyrene	0.800	0.917		ug/L		115	70 - 130	6	20
Benzo[b]fluoranthene	0.800	1.01		ug/L		126	70 - 130	2	20
Bis(2-chloroethyl)ether	0.800	1.03		ug/L		129	70 - 130	3	20
Dibenz(a,h)anthracene	0.800	0.893		ug/L		112	70 - 130	15	20
Hexachlorobenzene	0.800	1.06	*	ug/L		133	70 - 130	3	20
Indeno[1,2,3-cd]pyrene	0.800	0.914		ug/L		114	70 - 130	3	20
N-Nitrosodimethylamine	0.800	0.698		ug/L		87	20 - 160	9	20
Pentachlorophenol	1.60	2.33		ug/L		146	20 - 160	1	20

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 460-549535/1-A
Matrix: Water
Analysis Batch: 549683

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549535

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		09/04/18 10:05	09/05/18 00:11	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*42*		*10 - 150*	*09/04/18 10:05*	*09/05/18 00:11*	*1*

Lab Sample ID: LCS 460-549535/2-A
Matrix: Water
Analysis Batch: 549683

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549535

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	1.60	2.03		ug/L		127	10 - 200

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*39*		*10 - 200*

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 549683

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA
Prep Batch: 549535

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.016	U	1.60	1.63		ug/L		102	70 - 130

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
1,4-Dioxane-d8	42		10 - 150

Lab Sample ID: 460-163741-3 MSD
Matrix: Water
Analysis Batch: 549683

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA
Prep Batch: 549535

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.016	U	1.60	1.62		ug/L		101	70 - 130	1	20

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
1,4-Dioxane-d8	38		10 - 150

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 460-549636/1-A
Matrix: Water
Analysis Batch: 550219

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 549636

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		09/04/18 18:44	09/07/18 03:57	1
PCB-1016	0.12	U	0.40	0.12	ug/L		09/04/18 18:44	09/07/18 03:57	1
PCB-1221	0.12	U	0.40	0.12	ug/L		09/04/18 18:44	09/07/18 03:57	1
PCB-1232	0.12	U	0.40	0.12	ug/L		09/04/18 18:44	09/07/18 03:57	1
PCB-1242	0.12	U	0.40	0.12	ug/L		09/04/18 18:44	09/07/18 03:57	1
PCB-1248	0.12	U	0.40	0.12	ug/L		09/04/18 18:44	09/07/18 03:57	1
PCB-1254	0.11	U	0.40	0.11	ug/L		09/04/18 18:44	09/07/18 03:57	1
PCB-1260	0.11	U	0.40	0.11	ug/L		09/04/18 18:44	09/07/18 03:57	1
PCB-1262	0.11	U	0.40	0.11	ug/L		09/04/18 18:44	09/07/18 03:57	1
PCB-1268	0.11	U	0.40	0.11	ug/L		09/04/18 18:44	09/07/18 03:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	81		30 - 150	09/04/18 18:44	09/07/18 03:57	1
Tetrachloro-m-xylene	81		30 - 150	09/04/18 18:44	09/07/18 03:57	1
DCB Decachlorobiphenyl	78		30 - 150	09/04/18 18:44	09/07/18 03:57	1
DCB Decachlorobiphenyl	85		30 - 150	09/04/18 18:44	09/07/18 03:57	1

Lab Sample ID: LCS 460-549636/2-A
Matrix: Water
Analysis Batch: 550219

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 549636

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.53		ug/L		88	40 - 140
PCB-1016	4.00	3.72		ug/L		93	40 - 140
PCB-1260	4.00	3.50		ug/L		87	40 - 140
PCB-1260	4.00	3.82		ug/L		96	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	86		30 - 150
Tetrachloro-m-xylene	86		30 - 150
DCB Decachlorobiphenyl	84		30 - 150
DCB Decachlorobiphenyl	90		30 - 150

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 460-163741-3 MS — **Client Sample ID: RW-14S(135-155)-083118**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 550219 — **Prep Batch: 549636**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.12	U *	4.17	3.58		ug/L		86	40 - 140
PCB-1016	0.12	U F2	4.17	2.88		ug/L		69	40 - 140
PCB-1260	0.11	U *	4.17	3.70		ug/L		89	40 - 140
PCB-1260	0.11	U F2	4.17	2.96		ug/L		71	40 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*85*		*30 - 150*
Tetrachloro-m-xylene	*63*		*30 - 150*
DCB Decachlorobiphenyl	*85*		*30 - 150*
DCB Decachlorobiphenyl	*67*		*30 - 150*

Lab Sample ID: 460-163741-3 MSD — **Client Sample ID: RW-14S(135-155)-083118**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 550219 — **Prep Batch: 549636**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.12	U F2	4.17	3.76	F2	ug/L		90	40 - 140	26	20
PCB-1016	0.12	U *	4.17	3.91		ug/L		94	40 - 140	9	20
PCB-1260	0.11	U F2	4.17	3.94	F2	ug/L		95	40 - 140	28	20
PCB-1260	0.11	U *	4.17	4.09		ug/L		98	40 - 140	10	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*91*		*30 - 150*
Tetrachloro-m-xylene	*90*		*30 - 150*
DCB Decachlorobiphenyl	*91*		*30 - 150*
DCB Decachlorobiphenyl	*96*		*30 - 150*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 460-549578/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549578

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			09/04/18 15:16	1
Sulfate	0.33	U	0.60	0.33	mg/L			09/04/18 15:16	1

Lab Sample ID: LCS 460-549578/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 549578

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.458		mg/L		97	90 - 110
Sulfate	7.50	7.445		mg/L		99	90 - 110

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 460-549578/6
Matrix: Water
Analysis Batch: 549578

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			1.50	1.457		mg/L		97	90 - 110	0	15
Sulfate			7.50	7.432		mg/L		99	90 - 110	0	15

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 549578

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1.92		0.375	12.02	4	mg/L		2695	90 - 110

Lab Sample ID: 460-163741-3 MSD
Matrix: Water
Analysis Batch: 549578

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1.92		0.375	12.15	4	mg/L		2728	90 - 110	1	15

Lab Sample ID: 460-163741-3 DU
Matrix: Water
Analysis Batch: 549578

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	1.92		1.873		mg/L		2	15

Lab Sample ID: MB 460-549836/3
Matrix: Water
Analysis Batch: 549836

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.078	U	0.12	0.078	mg/L			09/05/18 07:51	1
Sulfate	0.33	U	0.60	0.33	mg/L			09/05/18 07:51	1

Lab Sample ID: LCS 460-549836/5
Matrix: Water
Analysis Batch: 549836

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			1.50	1.446		mg/L		96	90 - 110
Sulfate			7.50	7.446		mg/L		99	90 - 110

Lab Sample ID: LCSD 460-549836/6
Matrix: Water
Analysis Batch: 549836

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			1.50	1.445		mg/L		96	90 - 110	0	15
Sulfate			7.50	7.441		mg/L		99	90 - 110	0	15

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 549836

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	36.7	D	0.0750	34.81	4	mg/L		-2460	90 - 110

Lab Sample ID: 460-163741-3 MSD
Matrix: Water
Analysis Batch: 549836

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	36.7	D	0.0750	34.86	4	mg/L		-2398	90 - 110	0	15

Lab Sample ID: 460-163741-3 DU
Matrix: Water
Analysis Batch: 549836

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	36.7	D	37.36		mg/L		2	15

Method: 9056A - Anions, Ion Chromatography - DL

Lab Sample ID: 460-163741-10 MS
Matrix: Water
Analysis Batch: 549836

Client Sample ID: RW-13(100-120)-083018
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL	20.0	D	0.0750	20.00	4	mg/L		1	90 - 110
Sulfate - DL	74.1	D	0.375	75.87	4	mg/L		459	90 - 110

Lab Sample ID: 460-163741-10 MSD
Matrix: Water
Analysis Batch: 549836

Client Sample ID: RW-13(100-120)-083018
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride - DL	20.0	D	0.0750	19.89	4	mg/L		-136	90 - 110	1	15
Sulfate - DL	74.1	D	0.375	75.37	4	mg/L		327	90 - 110	1	15

Lab Sample ID: 460-163741-10 DU
Matrix: Water
Analysis Batch: 549836

Client Sample ID: RW-13(100-120)-083018
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	20.0	D	19.86		mg/L		0.7	15
Sulfate - DL	74.1	D	73.79		mg/L		0.5	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 460-550528/1-A ^2
Matrix: Water
Analysis Batch: 551612

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/12/18 13:58	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/08/18 03:00	09/12/18 13:58	2
Barium	1.1	U	4.0	1.1	ug/L		09/08/18 03:00	09/12/18 13:58	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/12/18 13:58	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/12/18 13:58	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/12/18 13:58	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/12/18 13:58	2
Copper	1.9	U	4.0	1.9	ug/L		09/08/18 03:00	09/12/18 13:58	2
Manganese	2.7	U	8.0	2.7	ug/L		09/08/18 03:00	09/12/18 13:58	2
Nickel	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/12/18 13:58	2
Lead	0.37	U	1.2	0.37	ug/L		09/08/18 03:00	09/12/18 13:58	2
Antimony	0.62	U	2.0	0.62	ug/L		09/08/18 03:00	09/12/18 13:58	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/12/18 13:58	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/08/18 03:00	09/12/18 13:58	2
Zinc	5.4	U	16.0	5.4	ug/L		09/08/18 03:00	09/12/18 13:58	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/08/18 03:00	09/12/18 13:58	2
Sodium	75.7	U	200	75.7	ug/L		09/08/18 03:00	09/12/18 13:58	2
Magnesium	65.7	U	200	65.7	ug/L		09/08/18 03:00	09/12/18 13:58	2
Potassium	64.9	U	200	64.9	ug/L		09/08/18 03:00	09/12/18 13:58	2
Calcium	67.6	U	200	67.6	ug/L		09/08/18 03:00	09/12/18 13:58	2
Iron	45.7	U	120	45.7	ug/L		09/08/18 03:00	09/12/18 13:58	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/12/18 13:58	2

Lab Sample ID: MB 460-550528/1-A ^2
Matrix: Water
Analysis Batch: 552206

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		09/08/18 03:00	09/14/18 19:30	2
Arsenic	0.77	U	2.0	0.77	ug/L		09/08/18 03:00	09/14/18 19:30	2
Barium	1.1	U	4.0	1.1	ug/L		09/08/18 03:00	09/14/18 19:30	2
Beryllium	0.26	U	0.80	0.26	ug/L		09/08/18 03:00	09/14/18 19:30	2
Cadmium	0.61	U	2.0	0.61	ug/L		09/08/18 03:00	09/14/18 19:30	2
Cobalt	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 19:30	2
Chromium	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 19:30	2
Copper	1.9	U	4.0	1.9	ug/L		09/08/18 03:00	09/14/18 19:30	2
Manganese	2.7	U	8.0	2.7	ug/L		09/08/18 03:00	09/14/18 19:30	2
Nickel	1.3	U	4.0	1.3	ug/L		09/08/18 03:00	09/14/18 19:30	2
Lead	0.454	J	1.2	0.37	ug/L		09/08/18 03:00	09/14/18 19:30	2
Antimony	0.62	U	2.0	0.62	ug/L		09/08/18 03:00	09/14/18 19:30	2
Selenium	0.69	U	10.0	0.69	ug/L		09/08/18 03:00	09/14/18 19:30	2
Vanadium	1.2	U	4.0	1.2	ug/L		09/08/18 03:00	09/14/18 19:30	2
Zinc	5.4	U	16.0	5.4	ug/L		09/08/18 03:00	09/14/18 19:30	2
Aluminum	15.0	U	40.0	15.0	ug/L		09/08/18 03:00	09/14/18 19:30	2
Sodium	75.7	U	200	75.7	ug/L		09/08/18 03:00	09/14/18 19:30	2
Magnesium	65.7	U	200	65.7	ug/L		09/08/18 03:00	09/14/18 19:30	2
Potassium	64.9	U	200	64.9	ug/L		09/08/18 03:00	09/14/18 19:30	2
Calcium	67.6	U	200	67.6	ug/L		09/08/18 03:00	09/14/18 19:30	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-550528/1-A ^2
Matrix: Water
Analysis Batch: 552206

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	45.7	U	120	45.7	ug/L		09/08/18 03:00	09/14/18 19:30	2
Thallium	0.24	U	0.80	0.24	ug/L		09/08/18 03:00	09/14/18 19:30	2

Lab Sample ID: LCS 460-550528/2-A ^2
Matrix: Water
Analysis Batch: 551612

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	26.59		ug/L		106	80 - 120
Arsenic	50.0	56.71		ug/L		113	80 - 120
Barium	50.0	52.91		ug/L		106	80 - 120
Beryllium	25.0	27.01		ug/L		108	80 - 120
Cadmium	25.0	25.78		ug/L		103	80 - 120
Cobalt	25.0	26.88		ug/L		108	80 - 120
Chromium	50.0	53.80		ug/L		108	80 - 120
Copper	50.0	53.96		ug/L		108	80 - 120
Manganese	250	267.7		ug/L		107	80 - 120
Nickel	50.0	54.21		ug/L		108	80 - 120
Lead	25.0	26.54		ug/L		106	80 - 120
Antimony	25.0	27.02		ug/L		108	80 - 120
Selenium	50.0	54.25		ug/L		109	80 - 120
Vanadium	50.0	52.63		ug/L		105	80 - 120
Zinc	250	249.0		ug/L		100	80 - 120
Aluminum	2500	2571		ug/L		103	80 - 120
Sodium	2500	2719		ug/L		109	80 - 120
Magnesium	2500	2548		ug/L		102	80 - 120
Potassium	2500	2627		ug/L		105	80 - 120
Calcium	2500	2724		ug/L		109	80 - 120
Iron	2500	2838		ug/L		114	80 - 120
Thallium	20.0	21.19		ug/L		106	80 - 120

Lab Sample ID: LCS 460-550528/2-A ^2
Matrix: Water
Analysis Batch: 552206

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.0	27.27		ug/L		109	80 - 120
Arsenic	50.0	50.90		ug/L		102	80 - 120
Barium	50.0	50.77		ug/L		102	80 - 120
Beryllium	25.0	25.33		ug/L		101	80 - 120
Cadmium	25.0	27.04		ug/L		108	80 - 120
Cobalt	25.0	27.06		ug/L		108	80 - 120
Chromium	50.0	53.16		ug/L		106	80 - 120
Copper	50.0	54.23		ug/L		108	80 - 120
Manganese	250	264.7		ug/L		106	80 - 120
Nickel	50.0	53.67		ug/L		107	80 - 120
Lead	25.0	26.86		ug/L		107	80 - 120
Antimony	25.0	26.15		ug/L		105	80 - 120
Selenium	50.0	50.12		ug/L		100	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-550528/2-A ^2
Matrix: Water
Analysis Batch: 552206

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	50.0	51.96		ug/L		104	80 - 120
Zinc	250	256.4		ug/L		103	80 - 120
Aluminum	2500	2516		ug/L		101	80 - 120
Sodium	2500	2849		ug/L		114	80 - 120
Magnesium	2500	2603		ug/L		104	80 - 120
Potassium	2500	2592		ug/L		104	80 - 120
Calcium	2500	2610		ug/L		104	80 - 120
Iron	2500	2672		ug/L		107	80 - 120
Thallium	20.0	20.93		ug/L		105	80 - 120

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 551612

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA
Prep Batch: 550528

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	25.0	26.20		ug/L		105	75 - 125
Arsenic	1.4	J	50.0	51.16		ug/L		100	75 - 125
Barium	9.5		50.0	62.46		ug/L		106	75 - 125
Beryllium	0.26	U	25.0	26.96		ug/L		108	75 - 125
Cadmium	0.61	U	25.0	25.67		ug/L		103	75 - 125
Cobalt	1.3	U	25.0	26.23		ug/L		105	75 - 125
Chromium	1.3	U	50.0	53.09		ug/L		106	75 - 125
Copper	1.9	U	50.0	54.59		ug/L		109	75 - 125
Manganese	60.2		250	321.1		ug/L		104	75 - 125
Nickel	1.3	U	50.0	52.50		ug/L		105	75 - 125
Lead	0.37	U	25.0	26.95		ug/L		108	75 - 125
Antimony	0.65	J	25.0	27.41		ug/L		107	75 - 125
Selenium	0.69	U F1	50.0	23.38	F1	ug/L		47	75 - 125
Vanadium	1.8	J	50.0	54.29		ug/L		105	75 - 125
Zinc	5.4	U	250	250.7		ug/L		100	75 - 125
Aluminum	15.0	U	2500	2509		ug/L		100	75 - 125
Sodium	43600		2500	43980	4	ug/L		15	75 - 125
Magnesium	11900		2500	13850	4	ug/L		79	75 - 125
Potassium	2960		2500	5355		ug/L		96	75 - 125
Calcium	44200		2500	45100	4	ug/L		37	75 - 125
Iron	58.8	J	2500	2874		ug/L		113	75 - 125
Thallium	0.24	U	20.0	21.57		ug/L		108	75 - 125

Lab Sample ID: 460-163741-3 DU
Matrix: Water
Analysis Batch: 551612

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA
Prep Batch: 550528

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	1.4	J	1.04	J F5	ug/L		29	20
Barium	9.5		8.88		ug/L		7	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	1.3	U	1.3	U	ug/L		NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163741-3 DU
Matrix: Water
Analysis Batch: 551612

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA
Prep Batch: 550528

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chromium	1.3	U		1.3	U	ug/L				NC	20
Copper	1.9	U		1.9	U	ug/L				NC	20
Manganese	60.2			58.60		ug/L				3	20
Nickel	1.3	U		1.3	U	ug/L				NC	20
Lead	0.37	U		0.37	U	ug/L				NC	20
Antimony	0.65	J		0.870	J F5	ug/L				28	20
Selenium	0.69	U F1		0.69	U	ug/L				NC	20
Vanadium	1.8	J		1.70	J	ug/L				8	20
Zinc	5.4	U		5.4	U	ug/L				NC	20
Aluminum	15.0	U		15.0	U	ug/L				NC	20
Sodium	43600			42990		ug/L				1	20
Magnesium	11900			11720		ug/L				1	20
Potassium	2960			2924		ug/L				1	20
Calcium	44200			43970		ug/L				0.5	20
Iron	58.8	J		60.34	J	ug/L				3	20
Thallium	0.24	U		0.24	U	ug/L				NC	20

Lab Sample ID: LCS 460-552218/2-A
Matrix: Water
Analysis Batch: 552232

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 552218

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silver			5.00	5.31		ug/L		106	80 - 120		
Arsenic			10.0	10.86		ug/L		109	80 - 120		
Barium			10.0	9.59		ug/L		96	80 - 120		
Beryllium			5.00	4.84		ug/L		97	80 - 120		
Cadmium			5.00	4.87		ug/L		97	80 - 120		
Cobalt			5.00	5.04		ug/L		101	80 - 120		
Chromium			10.0	9.69		ug/L		97	80 - 120		
Copper			10.0	9.93		ug/L		99	80 - 120		
Manganese			50.0	49.40		ug/L		99	80 - 120		
Nickel			10.0	9.70		ug/L		97	80 - 120		
Lead			5.00	4.85		ug/L		97	80 - 120		
Antimony			5.00	4.39		ug/L		88	80 - 120		
Selenium			10.0	10.36		ug/L		104	80 - 120		
Vanadium			10.0	9.49		ug/L		95	80 - 120		
Zinc			50.0	47.40		ug/L		95	80 - 120		
Aluminum			500	484.4		ug/L		97	80 - 120		
Sodium			500	495.4		ug/L		99	80 - 120		
Magnesium			500	486.5		ug/L		97	80 - 120		
Potassium			500	471.1		ug/L		94	80 - 120		
Calcium			500	485.2		ug/L		97	80 - 120		
Iron			500	496.5		ug/L		99	80 - 120		
Thallium			4.00	3.81		ug/L		95	80 - 120		

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 460-550925/1-B
Matrix: Water
Analysis Batch: 552232

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 552218

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.68	U	1.0	0.68	ug/L		09/14/18 11:10	09/14/18 11:41	1
Arsenic	0.38	U	1.0	0.38	ug/L		09/14/18 11:10	09/14/18 11:41	1
Barium	0.57	U	2.0	0.57	ug/L		09/14/18 11:10	09/14/18 11:41	1
Beryllium	0.13	U	0.40	0.13	ug/L		09/14/18 11:10	09/14/18 11:41	1
Cadmium	0.31	U	1.0	0.31	ug/L		09/14/18 11:10	09/14/18 11:41	1
Cobalt	0.64	U	2.0	0.64	ug/L		09/14/18 11:10	09/14/18 11:41	1
Chromium	0.66	U	2.0	0.66	ug/L		09/14/18 11:10	09/14/18 11:41	1
Copper	0.95	U	2.0	0.95	ug/L		09/14/18 11:10	09/14/18 11:41	1
Manganese	1.3	U	4.0	1.3	ug/L		09/14/18 11:10	09/14/18 11:41	1
Nickel	0.65	U	2.0	0.65	ug/L		09/14/18 11:10	09/14/18 11:41	1
Lead	0.19	U	0.60	0.19	ug/L		09/14/18 11:10	09/14/18 11:41	1
Antimony	0.31	U	1.0	0.31	ug/L		09/14/18 11:10	09/14/18 11:41	1
Selenium	0.35	U	5.0	0.35	ug/L		09/14/18 11:10	09/14/18 11:41	1
Vanadium	0.59	U	2.0	0.59	ug/L		09/14/18 11:10	09/14/18 11:41	1
Aluminum	7.5	U	20.0	7.5	ug/L		09/14/18 11:10	09/14/18 11:41	1
Sodium	37.9	U	100	37.9	ug/L		09/14/18 11:10	09/14/18 11:41	1
Magnesium	32.9	U	100	32.9	ug/L		09/14/18 11:10	09/14/18 11:41	1
Potassium	32.5	U	100	32.5	ug/L		09/14/18 11:10	09/14/18 11:41	1
Calcium	33.8	U	100	33.8	ug/L		09/14/18 11:10	09/14/18 11:41	1
Iron	22.9	U	60.0	22.9	ug/L		09/14/18 11:10	09/14/18 11:41	1
Thallium	0.12	U	0.40	0.12	ug/L		09/14/18 11:10	09/14/18 11:41	1

Lab Sample ID: MB 460-550925/1-B
Matrix: Water
Analysis Batch: 552232

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 552218

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	2.7	U	8.0	2.7	ug/L		09/14/18 11:10	09/14/18 17:29	1

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 552232

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Dissolved
Prep Batch: 552218

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	1.4	U	10.0	10.59		ug/L		106	75 - 125
Arsenic	2.1		20.0	21.88		ug/L		99	75 - 125
Barium	9.6		20.0	29.32		ug/L		99	75 - 125
Beryllium	0.26	U	10.0	9.69		ug/L		97	75 - 125
Cadmium	0.61	U	10.0	9.88		ug/L		99	75 - 125
Cobalt	1.3	U	10.0	10.07		ug/L		101	75 - 125
Chromium	1.3	U	20.0	19.52		ug/L		98	75 - 125
Copper	1.9	U	20.0	19.67		ug/L		98	75 - 125
Manganese	46.4		100	143.6		ug/L		97	75 - 125
Nickel	1.3	U	20.0	20.09		ug/L		100	75 - 125
Lead	0.37	U	10.0	10.05		ug/L		101	75 - 125
Antimony	0.62	U	10.0	8.97		ug/L		90	75 - 125
Selenium	0.69	U	20.0	22.01		ug/L		110	75 - 125
Vanadium	1.4	J	20.0	21.19		ug/L		99	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 552232

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Dissolved
Prep Batch: 552218

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	5.4	U	100	97.64		ug/L		98	75 - 125
Aluminum	15.0	U	1000	994.1		ug/L		99	75 - 125
Sodium	46800		1000	47720	4	ug/L		95	75 - 125
Magnesium	12300		1000	13080	4	ug/L		76	75 - 125
Potassium	2830		1000	3745		ug/L		92	75 - 125
Calcium	43500		1000	44210	4	ug/L		70	75 - 125
Iron	45.7	U	1000	1026		ug/L		103	75 - 125
Thallium	0.24	U	8.00	8.00		ug/L		100	75 - 125

Lab Sample ID: 460-163741-3 DU
Matrix: Water
Analysis Batch: 552232

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Dissolved
Prep Batch: 552218

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	1.4	U	1.4	U	ug/L		NC	20
Arsenic	2.1		1.99	J	ug/L		7	20
Barium	9.6		9.09		ug/L		5	20
Beryllium	0.26	U	0.26	U	ug/L		NC	20
Cadmium	0.61	U	0.61	U	ug/L		NC	20
Cobalt	1.3	U	1.3	U	ug/L		NC	20
Chromium	1.3	U	1.3	U	ug/L		NC	20
Copper	1.9	U	1.9	U	ug/L		NC	20
Manganese	46.4		47.78		ug/L		3	20
Nickel	1.3	U	1.3	U	ug/L		NC	20
Lead	0.37	U	0.37	U	ug/L		NC	20
Antimony	0.62	U	0.62	U	ug/L		NC	20
Selenium	0.69	U	0.69	U	ug/L		NC	20
Vanadium	1.4	J	1.45	J	ug/L		2	20
Zinc	5.4	U	5.4	U	ug/L		NC	20
Aluminum	15.0	U	15.0	U	ug/L		NC	20
Sodium	46800		47080		ug/L		0.7	20
Magnesium	12300		12240		ug/L		0.6	20
Potassium	2830		2836		ug/L		0.3	20
Calcium	43500		43780		ug/L		0.6	20
Iron	45.7	U	45.7	U	ug/L		NC	20
Thallium	0.24	U	0.24	U	ug/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 460-550265/13-A
Matrix: Water
Analysis Batch: 550393

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550265

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:18	09/07/18 08:48	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 460-550265/14-A
Matrix: Water
Analysis Batch: 550393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550265

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			1.00	1.01		ug/L		101	80 - 120		

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 550393

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA
Prep Batch: 550265

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.12	U	1.00	1.00		ug/L		100	75 - 125		

Lab Sample ID: 460-163741-3 DU
Matrix: Water
Analysis Batch: 550393

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA
Prep Batch: 550265

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.12	U		0.12	U	ug/L				NC	20

Lab Sample ID: MB 460-550267/1-A
Matrix: Water
Analysis Batch: 550393

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550267

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:41	09/07/18 09:42	1

Lab Sample ID: LCS 460-550267/2-A
Matrix: Water
Analysis Batch: 550393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550267

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			1.00	1.02		ug/L		102	80 - 120		

Lab Sample ID: 460-163366-G-4-D MS
Matrix: Water
Analysis Batch: 550393

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 550267

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.12	U	1.00	1.00		ug/L		100	75 - 125		

Lab Sample ID: 460-163366-B-4-B DU
Matrix: Water
Analysis Batch: 550393

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 550267

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.12	U		0.12	U	ug/L				NC	20

Lab Sample ID: LCS 460-550280/2-A
Matrix: Water
Analysis Batch: 550393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550280

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			1.00	1.01		ug/L		101	80 - 120		

Lab Sample ID: MB 460-550262/1-B
Matrix: Water
Analysis Batch: 550393

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 550280

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		09/07/18 05:55	09/07/18 10:24	1

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 550393

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Dissolved
Prep Batch: 550280

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12	U	1.00	1.02		ug/L		102	75 - 125

Lab Sample ID: 460-163741-3 DU
Matrix: Water
Analysis Batch: 550393

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Dissolved
Prep Batch: 550280

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12	U	0.12	U	ug/L		NC	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 460-550885/1-A
Matrix: Water
Analysis Batch: 550966

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 08:47	09/10/18 12:53	1

Lab Sample ID: LCS 460-550885/2-A
Matrix: Water
Analysis Batch: 550966

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550885

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0993		mg/L		99	85 - 115

Lab Sample ID: 460-163741-3 MS
Matrix: Water
Analysis Batch: 550966

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA
Prep Batch: 550885

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0020	U	0.200	0.190		mg/L		95	75 - 125

Lab Sample ID: 460-163741-3 MSD
Matrix: Water
Analysis Batch: 550966

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA
Prep Batch: 550885

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U	0.200	0.176		mg/L		88	75 - 125	8	20

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: MB 460-550922/1-A
Matrix: Water
Analysis Batch: 550966

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550922

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		09/10/18 11:18	09/10/18 13:22	1

Lab Sample ID: LCS 460-550922/2-A
Matrix: Water
Analysis Batch: 550966

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0997		mg/L		100	85 - 115

Lab Sample ID: 460-163741-11 MS
Matrix: Water
Analysis Batch: 550966

Client Sample ID: RW-3DS(155-160)-083018
Prep Type: Total/NA
Prep Batch: 550922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0020	U	0.200	0.190		mg/L		95	75 - 125

Lab Sample ID: 460-163741-11 MSD
Matrix: Water
Analysis Batch: 550966

Client Sample ID: RW-3DS(155-160)-083018
Prep Type: Total/NA
Prep Batch: 550922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.0020	U	0.200	0.177		mg/L		89	75 - 125	7	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 460-549615/2
Matrix: Water
Analysis Batch: 549615

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			09/04/18 11:04	1
Alkalinity	5.0	U	5.0	5.0	mg/L			09/04/18 11:04	1

Lab Sample ID: MB 460-549615/25
Matrix: Water
Analysis Batch: 549615

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			09/04/18 14:27	1
Alkalinity	5.0	U	5.0	5.0	mg/L			09/04/18 14:27	1

Lab Sample ID: LCSSRM 460-549615/26
Matrix: Water
Analysis Batch: 549615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	384	367.6		mg/L		95.7	84.9 - 114.8

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSSRM 460-549615/3
Matrix: Water
Analysis Batch: 549615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			384	368.2		mg/L		95.9	84.9 - 114.8		

Lab Sample ID: 460-163741-3 DU
Matrix: Water
Analysis Batch: 549615

Client Sample ID: RW-14S(135-155)-083118
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	190			189.9		mg/L				0.09	10
Alkalinity	190			189.9		mg/L				0.09	10

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Analysis Batch: 549619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	8260C	
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	8260C	
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	8260C	
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	8260C	
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	8260C	
460-163741-6	DUP-04-083118	Total/NA	Water	8260C	
460-163741-7	FB-04-083118	Total/NA	Water	8260C	
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	8260C	
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	8260C	
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	8260C	
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	8260C	
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	8260C	
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	8260C	
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	8260C	
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	8260C	
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	8260C	
460-163741-17	TB-06-083118	Total/NA	Water	8260C	
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	8260C	
MB 460-549619/8	Method Blank	Total/NA	Water	8260C	
LCS 460-549619/4	Lab Control Sample	Total/NA	Water	8260C	
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	8260C	
460-163741-3 MSD	RW-14S(135-155)-083118	Total/NA	Water	8260C	

Analysis Batch: 551032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	8260C SIM	
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	8260C SIM	
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	8260C SIM	
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	8260C SIM	
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	8260C SIM	
MB 460-551032/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-551032/4	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-551032/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Analysis Batch: 551171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	8260C SIM	
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	8260C SIM	
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	8260C SIM	
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	8260C SIM	
460-163741-6	DUP-04-083118	Total/NA	Water	8260C SIM	
460-163741-7	FB-04-083118	Total/NA	Water	8260C SIM	
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	8260C SIM	
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	8260C SIM	
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	8260C SIM	
MB 460-551171/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-551171/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-551171/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

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Analysis Batch: 551357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	8260C SIM	
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	8260C SIM	
460-163741-17	TB-06-083118	Total/NA	Water	8260C SIM	
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	8260C SIM	
MB 460-551357/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-551357/5	Lab Control Sample	Total/NA	Water	8260C SIM	

Analysis Batch: 551666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-551666/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-551666/4	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-551666/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	8260C SIM	
460-163741-3 MSD	RW-14S(135-155)-083118	Total/NA	Water	8260C SIM	

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Prep Batch: 549338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	3510C	
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	3510C	
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	3510C	
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	3510C	
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	3510C	
460-163741-6	DUP-04-083118	Total/NA	Water	3510C	
MB 460-549338/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-549338/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-549338/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-549338/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-549338/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	3510C	
460-163741-3 MSD	RW-14S(135-155)-083118	Total/NA	Water	3510C	

Analysis Batch: 549364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	8270D	549338
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	8270D	549338
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	8270D	549338
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	8270D	549338
460-163741-6	DUP-04-083118	Total/NA	Water	8270D	549338
MB 460-549338/1-A	Method Blank	Total/NA	Water	8270D	549338
LCS 460-549338/2-A	Lab Control Sample	Total/NA	Water	8270D	549338
LCS 460-549338/3-A	Lab Control Sample	Total/NA	Water	8270D	549338
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	8270D	549338
460-163741-3 MSD	RW-14S(135-155)-083118	Total/NA	Water	8270D	549338

Analysis Batch: 549391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	8270D SIM	549338
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	8270D SIM	549338

GC/MS Semi VOA (Continued)

Analysis Batch: 549391 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	8270D SIM	549338
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	8270D SIM	549338
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	8270D SIM	549338
460-163741-6	DUP-04-083118	Total/NA	Water	8270D SIM	549338
MB 460-549338/1-A	Method Blank	Total/NA	Water	8270D SIM	549338
LCS 460-549338/4-A	Lab Control Sample	Total/NA	Water	8270D SIM	549338
LCSD 460-549338/5-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	549338

Prep Batch: 549397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-7	FB-04-083118	Total/NA	Water	3510C	
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	3510C	
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	3510C	
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	3510C	
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	3510C	
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	3510C	
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	3510C	
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	3510C	
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	3510C	
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	3510C	
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	3510C	
MB 460-549397/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-549397/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-549397/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-549397/6-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-549397/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 460-549397/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 460-549397/7-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 549462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-549397/1-A	Method Blank	Total/NA	Water	8270D SIM	549397
LCS 460-549397/6-A	Lab Control Sample	Total/NA	Water	8270D SIM	549397
LCSD 460-549397/7-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	549397

Analysis Batch: 549470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-7	FB-04-083118	Total/NA	Water	8270D	549397
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	8270D	549397
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	8270D	549397
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	8270D	549397
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	8270D	549397
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	8270D	549397
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	8270D	549397
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	8270D	549397
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	8270D	549397
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	8270D	549397
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	8270D	549397
LCS 460-549397/4-A	Lab Control Sample	Total/NA	Water	8270D	549397
LCSD 460-549397/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	549397

GC/MS Semi VOA (Continued)

Prep Batch: 549535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	3510C	
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	3510C	
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	3510C	
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	3510C	
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	3510C	
460-163741-6	DUP-04-083118	Total/NA	Water	3510C	
460-163741-7	FB-04-083118	Total/NA	Water	3510C	
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	3510C	
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	3510C	
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	3510C	
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	3510C	
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	3510C	
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	3510C	
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	3510C	
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	3510C	
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	3510C	
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	3510C	
MB 460-549535/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-549535/2-A	Lab Control Sample	Total/NA	Water	3510C	
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	3510C	
460-163741-3 MSD	RW-14S(135-155)-083118	Total/NA	Water	3510C	

Analysis Batch: 549683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	8270D SIM ID	549535
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	8270D SIM ID	549535
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	8270D SIM ID	549535
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	8270D SIM ID	549535
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	8270D SIM ID	549535
460-163741-6	DUP-04-083118	Total/NA	Water	8270D SIM ID	549535
460-163741-7	FB-04-083118	Total/NA	Water	8270D SIM ID	549535
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	8270D SIM ID	549535
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	8270D SIM ID	549535
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	8270D SIM ID	549535
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	8270D SIM ID	549535
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	8270D SIM ID	549535
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	8270D SIM ID	549535
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	8270D SIM ID	549535
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	8270D SIM ID	549535
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	8270D SIM ID	549535
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	8270D SIM ID	549535
MB 460-549535/1-A	Method Blank	Total/NA	Water	8270D SIM ID	549535
LCS 460-549535/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	549535
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	8270D SIM ID	549535
460-163741-3 MSD	RW-14S(135-155)-083118	Total/NA	Water	8270D SIM ID	549535

Analysis Batch: 549718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-549397/1-A	Method Blank	Total/NA	Water	8270D	549397
LCS 460-549397/2-A	Lab Control Sample	Total/NA	Water	8270D	549397
LCSD 460-549397/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	549397

Analysis Batch: 549753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-7	FB-04-083118	Total/NA	Water	8270D SIM	549397
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	8270D SIM	549397
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	8270D SIM	549397
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	8270D SIM	549397
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	8270D SIM	549397
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	8270D SIM	549397
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	8270D SIM	549397
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	8270D SIM	549397
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	8270D SIM	549397
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	8270D SIM	549397
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	8270D SIM	549397

Prep Batch: 549791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	3510C	
MB 460-549791/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-549791/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-549791/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-549791/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 460-549791/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 549905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	8270D	549791
MB 460-549791/1-A	Method Blank	Total/NA	Water	8270D	549791
LCS 460-549791/2-A	Lab Control Sample	Total/NA	Water	8270D	549791
LCS 460-549791/4-A	Lab Control Sample	Total/NA	Water	8270D	549791
LCSD 460-549791/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	549791
LCSD 460-549791/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	549791

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Prep Batch: 549636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	3510C	
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	3510C	
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	3510C	
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	3510C	
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	3510C	
460-163741-6	DUP-04-083118	Total/NA	Water	3510C	
460-163741-7	FB-04-083118	Total/NA	Water	3510C	
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	3510C	
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	3510C	
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	3510C	
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	3510C	
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	3510C	
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	3510C	
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	3510C	
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	3510C	
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	3510C	
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	3510C	
MB 460-549636/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-549636/2-A	Lab Control Sample	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Prep Batch: 549636 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	3510C	
460-163741-3 MSD	RW-14S(135-155)-083118	Total/NA	Water	3510C	

Analysis Batch: 550219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	8082A	549636
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	8082A	549636
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	8082A	549636
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	8082A	549636
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	8082A	549636
460-163741-6	DUP-04-083118	Total/NA	Water	8082A	549636
460-163741-7	FB-04-083118	Total/NA	Water	8082A	549636
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	8082A	549636
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	8082A	549636
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	8082A	549636
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	8082A	549636
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	8082A	549636
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	8082A	549636
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	8082A	549636
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	8082A	549636
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	8082A	549636
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	8082A	549636
MB 460-549636/1-A	Method Blank	Total/NA	Water	8082A	549636
LCS 460-549636/2-A	Lab Control Sample	Total/NA	Water	8082A	549636
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	8082A	549636
460-163741-3 MSD	RW-14S(135-155)-083118	Total/NA	Water	8082A	549636

HPLC/IC

Analysis Batch: 549578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	9056A	
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	9056A	
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	9056A	
460-163741-7	FB-04-083118	Total/NA	Water	9056A	
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	9056A	
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	9056A	
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	9056A	
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	9056A	
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	9056A	
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	9056A	
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	9056A	
MB 460-549578/3	Method Blank	Total/NA	Water	9056A	
LCS 460-549578/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-549578/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	9056A	
460-163741-3 MSD	RW-14S(135-155)-083118	Total/NA	Water	9056A	
460-163741-3 DU	RW-14S(135-155)-083118	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 549836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-2 - DL	RW-11D(262-267)-083118	Total/NA	Water	9056A	
460-163741-3 - DL	RW-14S(135-155)-083118	Total/NA	Water	9056A	
460-163741-4 - DL	RW-15S(110-120)-083118	Total/NA	Water	9056A	
460-163741-5 - DL	RW-15D(127-137)-083118	Total/NA	Water	9056A	
460-163741-6 - DL	DUP-04-083118	Total/NA	Water	9056A	
460-163741-8 - DL	RW-14D(175-185)-083118	Total/NA	Water	9056A	
460-163741-9 - DL	RW-13(150-170)-083018	Total/NA	Water	9056A	
460-163741-10 - DL	RW-13(100-120)-083018	Total/NA	Water	9056A	
460-163741-11 - DL	RW-3DS(155-160)-083018	Total/NA	Water	9056A	
460-163741-12 - DL	RW-3DD(175-180)-083018	Total/NA	Water	9056A	
460-163741-13 - DL	RW-3(77-87)-083018	Total/NA	Water	9056A	
MB 460-549836/3	Method Blank	Total/NA	Water	9056A	
LCS 460-549836/5	Lab Control Sample	Total/NA	Water	9056A	
LCSD 460-549836/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	9056A	
460-163741-3 MSD	RW-14S(135-155)-083118	Total/NA	Water	9056A	
460-163741-10 MS - DL	RW-13(100-120)-083018	Total/NA	Water	9056A	
460-163741-10 MSD - DL	RW-13(100-120)-083018	Total/NA	Water	9056A	
460-163741-3 DU	RW-14S(135-155)-083118	Total/NA	Water	9056A	
460-163741-10 DU - DL	RW-13(100-120)-083018	Total/NA	Water	9056A	

Metals

Filtration Batch: 550262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Dissolved	Water	FILTRATION	
460-163741-2	RW-11D(262-267)-083118	Dissolved	Water	FILTRATION	
460-163741-3	RW-14S(135-155)-083118	Dissolved	Water	FILTRATION	
460-163741-4	RW-15S(110-120)-083118	Dissolved	Water	FILTRATION	
460-163741-5	RW-15D(127-137)-083118	Dissolved	Water	FILTRATION	
460-163741-6	DUP-04-083118	Dissolved	Water	FILTRATION	
460-163741-7	FB-04-083118	Dissolved	Water	FILTRATION	
460-163741-8	RW-14D(175-185)-083118	Dissolved	Water	FILTRATION	
460-163741-9	RW-13(150-170)-083018	Dissolved	Water	FILTRATION	
460-163741-10	RW-13(100-120)-083018	Dissolved	Water	FILTRATION	
460-163741-11	RW-3DS(155-160)-083018	Dissolved	Water	FILTRATION	
460-163741-12	RW-3DD(175-180)-083018	Dissolved	Water	FILTRATION	
460-163741-13	RW-3(77-87)-083018	Dissolved	Water	FILTRATION	
460-163741-14	RW-4(333-343)-083018	Dissolved	Water	FILTRATION	
460-163741-15	RW-4(393-403)-083018	Dissolved	Water	FILTRATION	
460-163741-16	RW-4A(62-72)-083018	Dissolved	Water	FILTRATION	
460-163741-18	RW-4A-(113-123)-083018	Dissolved	Water	FILTRATION	
MB 460-550262/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163741-3 MS	RW-14S(135-155)-083118	Dissolved	Water	FILTRATION	
460-163741-3 DU	RW-14S(135-155)-083118	Dissolved	Water	FILTRATION	

Prep Batch: 550265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	7470A	
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 550265 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	7470A	
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	7470A	
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	7470A	
460-163741-6	DUP-04-083118	Total/NA	Water	7470A	
460-163741-7	FB-04-083118	Total/NA	Water	7470A	
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	7470A	
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	7470A	
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	7470A	
MB 460-550265/13-A	Method Blank	Total/NA	Water	7470A	
LCS 460-550265/14-A	Lab Control Sample	Total/NA	Water	7470A	
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	7470A	
460-163741-3 DU	RW-14S(135-155)-083118	Total/NA	Water	7470A	

Prep Batch: 550267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	7470A	
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	7470A	
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	7470A	
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	7470A	
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	7470A	
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	7470A	
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	7470A	
MB 460-550267/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-550267/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163366-G-4-D MS	Matrix Spike	Total/NA	Water	7470A	
460-163366-B-4-B DU	Duplicate	Total/NA	Water	7470A	

Prep Batch: 550280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Dissolved	Water	7470A	550262
460-163741-2	RW-11D(262-267)-083118	Dissolved	Water	7470A	550262
460-163741-3	RW-14S(135-155)-083118	Dissolved	Water	7470A	550262
460-163741-4	RW-15S(110-120)-083118	Dissolved	Water	7470A	550262
460-163741-5	RW-15D(127-137)-083118	Dissolved	Water	7470A	550262
460-163741-6	DUP-04-083118	Dissolved	Water	7470A	550262
460-163741-7	FB-04-083118	Dissolved	Water	7470A	550262
460-163741-8	RW-14D(175-185)-083118	Dissolved	Water	7470A	550262
460-163741-9	RW-13(150-170)-083018	Dissolved	Water	7470A	550262
460-163741-10	RW-13(100-120)-083018	Dissolved	Water	7470A	550262
460-163741-11	RW-3DS(155-160)-083018	Dissolved	Water	7470A	550262
460-163741-12	RW-3DD(175-180)-083018	Dissolved	Water	7470A	550262
460-163741-13	RW-3(77-87)-083018	Dissolved	Water	7470A	550262
460-163741-14	RW-4(333-343)-083018	Dissolved	Water	7470A	550262
460-163741-15	RW-4(393-403)-083018	Dissolved	Water	7470A	550262
460-163741-16	RW-4A(62-72)-083018	Dissolved	Water	7470A	550262
460-163741-18	RW-4A-(113-123)-083018	Dissolved	Water	7470A	550262
MB 460-550262/1-B	Method Blank	Dissolved	Water	7470A	550262
LCS 460-550280/2-A	Lab Control Sample	Total/NA	Water	7470A	
460-163741-3 MS	RW-14S(135-155)-083118	Dissolved	Water	7470A	550262
460-163741-3 DU	RW-14S(135-155)-083118	Dissolved	Water	7470A	550262

Metals (Continued)

Analysis Batch: 550393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Dissolved	Water	7470A	550280
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	7470A	550265
460-163741-2	RW-11D(262-267)-083118	Dissolved	Water	7470A	550280
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	7470A	550265
460-163741-3	RW-14S(135-155)-083118	Dissolved	Water	7470A	550280
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	7470A	550265
460-163741-4	RW-15S(110-120)-083118	Dissolved	Water	7470A	550280
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	7470A	550265
460-163741-5	RW-15D(127-137)-083118	Dissolved	Water	7470A	550280
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	7470A	550265
460-163741-6	DUP-04-083118	Dissolved	Water	7470A	550280
460-163741-6	DUP-04-083118	Total/NA	Water	7470A	550265
460-163741-7	FB-04-083118	Dissolved	Water	7470A	550280
460-163741-7	FB-04-083118	Total/NA	Water	7470A	550265
460-163741-8	RW-14D(175-185)-083118	Dissolved	Water	7470A	550280
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	7470A	550265
460-163741-9	RW-13(150-170)-083018	Dissolved	Water	7470A	550280
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	7470A	550265
460-163741-10	RW-13(100-120)-083018	Dissolved	Water	7470A	550280
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	7470A	550265
460-163741-11	RW-3DS(155-160)-083018	Dissolved	Water	7470A	550280
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	7470A	550267
460-163741-12	RW-3DD(175-180)-083018	Dissolved	Water	7470A	550280
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	7470A	550267
460-163741-13	RW-3(77-87)-083018	Dissolved	Water	7470A	550280
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	7470A	550267
460-163741-14	RW-4(333-343)-083018	Dissolved	Water	7470A	550280
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	7470A	550267
460-163741-15	RW-4(393-403)-083018	Dissolved	Water	7470A	550280
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	7470A	550267
460-163741-16	RW-4A(62-72)-083018	Dissolved	Water	7470A	550280
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	7470A	550267
460-163741-18	RW-4A-(113-123)-083018	Dissolved	Water	7470A	550280
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	7470A	550267
MB 460-550262/1-B	Method Blank	Dissolved	Water	7470A	550280
MB 460-550265/13-A	Method Blank	Total/NA	Water	7470A	550265
MB 460-550267/1-A	Method Blank	Total/NA	Water	7470A	550267
LCS 460-550265/14-A	Lab Control Sample	Total/NA	Water	7470A	550265
LCS 460-550267/2-A	Lab Control Sample	Total/NA	Water	7470A	550267
LCS 460-550280/2-A	Lab Control Sample	Total/NA	Water	7470A	550280
460-163366-G-4-D MS	Matrix Spike	Total/NA	Water	7470A	550267
460-163741-3 MS	RW-14S(135-155)-083118	Dissolved	Water	7470A	550280
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	7470A	550265
460-163366-B-4-B DU	Duplicate	Total/NA	Water	7470A	550267
460-163741-3 DU	RW-14S(135-155)-083118	Dissolved	Water	7470A	550280
460-163741-3 DU	RW-14S(135-155)-083118	Total/NA	Water	7470A	550265

Prep Batch: 550528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	3010A	
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 550528 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	3010A	
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	3010A	
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	3010A	
460-163741-6	DUP-04-083118	Total/NA	Water	3010A	
460-163741-7	FB-04-083118	Total/NA	Water	3010A	
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	3010A	
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	3010A	
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	3010A	
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	3010A	
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	3010A	
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	3010A	
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	3010A	
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	3010A	
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	3010A	
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	3010A	
MB 460-550528/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-550528/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	3010A	
460-163741-3 DU	RW-14S(135-155)-083118	Total/NA	Water	3010A	

Filtration Batch: 550925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Dissolved	Water	FILTRATION	
460-163741-2	RW-11D(262-267)-083118	Dissolved	Water	FILTRATION	
460-163741-3	RW-14S(135-155)-083118	Dissolved	Water	FILTRATION	
460-163741-4	RW-15S(110-120)-083118	Dissolved	Water	FILTRATION	
460-163741-5	RW-15D(127-137)-083118	Dissolved	Water	FILTRATION	
460-163741-6	DUP-04-083118	Dissolved	Water	FILTRATION	
460-163741-7	FB-04-083118	Dissolved	Water	FILTRATION	
460-163741-8	RW-14D(175-185)-083118	Dissolved	Water	FILTRATION	
460-163741-9	RW-13(150-170)-083018	Dissolved	Water	FILTRATION	
460-163741-10	RW-13(100-120)-083018	Dissolved	Water	FILTRATION	
460-163741-11	RW-3DS(155-160)-083018	Dissolved	Water	FILTRATION	
460-163741-12	RW-3DD(175-180)-083018	Dissolved	Water	FILTRATION	
460-163741-13	RW-3(77-87)-083018	Dissolved	Water	FILTRATION	
460-163741-14	RW-4(333-343)-083018	Dissolved	Water	FILTRATION	
460-163741-15	RW-4(393-403)-083018	Dissolved	Water	FILTRATION	
460-163741-16	RW-4A(62-72)-083018	Dissolved	Water	FILTRATION	
460-163741-18	RW-4A-(113-123)-083018	Dissolved	Water	FILTRATION	
MB 460-550925/1-B	Method Blank	Dissolved	Water	FILTRATION	
460-163741-3 MS	RW-14S(135-155)-083118	Dissolved	Water	FILTRATION	
460-163741-3 DU	RW-14S(135-155)-083118	Dissolved	Water	FILTRATION	

Analysis Batch: 551612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	6020B	550528
MB 460-550528/1-A ^2	Method Blank	Total/NA	Water	6020B	550528
LCS 460-550528/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	550528
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	6020B	550528
460-163741-3 DU	RW-14S(135-155)-083118	Total/NA	Water	6020B	550528

Metals (Continued)

Analysis Batch: 552206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	6020B	550528
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	6020B	550528
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	6020B	550528
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	6020B	550528
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	6020B	550528
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	6020B	550528
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	6020B	550528
MB 460-550528/1-A ^2	Method Blank	Total/NA	Water	6020B	550528
LCS 460-550528/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	550528

Analysis Batch: 552207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	6020B	550528
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	6020B	550528
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	6020B	550528
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	6020B	550528
460-163741-6	DUP-04-083118	Total/NA	Water	6020B	550528
460-163741-6	DUP-04-083118	Total/NA	Water	6020B	550528
460-163741-7	FB-04-083118	Total/NA	Water	6020B	550528
460-163741-7	FB-04-083118	Total/NA	Water	6020B	550528
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	6020B	550528
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	6020B	550528
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	6020B	550528
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	6020B	550528
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	6020B	550528
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	6020B	550528
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	6020B	550528
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	6020B	550528
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	6020B	550528
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	6020B	550528
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	6020B	550528
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	6020B	550528

Prep Batch: 552218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Dissolved	Water	3010A	550925
460-163741-2	RW-11D(262-267)-083118	Dissolved	Water	3010A	550925
460-163741-3	RW-14S(135-155)-083118	Dissolved	Water	3010A	550925
460-163741-4	RW-15S(110-120)-083118	Dissolved	Water	3010A	550925
460-163741-5	RW-15D(127-137)-083118	Dissolved	Water	3010A	550925
460-163741-6	DUP-04-083118	Dissolved	Water	3010A	550925
460-163741-7	FB-04-083118	Dissolved	Water	3010A	550925
460-163741-8	RW-14D(175-185)-083118	Dissolved	Water	3010A	550925
460-163741-9	RW-13(150-170)-083018	Dissolved	Water	3010A	550925
460-163741-10	RW-13(100-120)-083018	Dissolved	Water	3010A	550925
460-163741-11	RW-3DS(155-160)-083018	Dissolved	Water	3010A	550925
460-163741-12	RW-3DD(175-180)-083018	Dissolved	Water	3010A	550925
460-163741-13	RW-3(77-87)-083018	Dissolved	Water	3010A	550925
460-163741-14	RW-4(333-343)-083018	Dissolved	Water	3010A	550925
460-163741-15	RW-4(393-403)-083018	Dissolved	Water	3010A	550925
460-163741-16	RW-4A(62-72)-083018	Dissolved	Water	3010A	550925

Metals (Continued)

Prep Batch: 552218 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-18	RW-4A-(113-123)-083018	Dissolved	Water	3010A	550925
MB 460-550925/1-B	Method Blank	Dissolved	Water	3010A	550925
LCS 460-552218/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-163741-3 MS	RW-14S(135-155)-083118	Dissolved	Water	3010A	550925
460-163741-3 DU	RW-14S(135-155)-083118	Dissolved	Water	3010A	550925

Analysis Batch: 552232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Dissolved	Water	6020B	552218
460-163741-2	RW-11D(262-267)-083118	Dissolved	Water	6020B	552218
460-163741-3	RW-14S(135-155)-083118	Dissolved	Water	6020B	552218
460-163741-4	RW-15S(110-120)-083118	Dissolved	Water	6020B	552218
460-163741-5	RW-15D(127-137)-083118	Dissolved	Water	6020B	552218
460-163741-6	DUP-04-083118	Dissolved	Water	6020B	552218
460-163741-7	FB-04-083118	Dissolved	Water	6020B	552218
460-163741-8	RW-14D(175-185)-083118	Dissolved	Water	6020B	552218
460-163741-9	RW-13(150-170)-083018	Dissolved	Water	6020B	552218
460-163741-10	RW-13(100-120)-083018	Dissolved	Water	6020B	552218
460-163741-11	RW-3DS(155-160)-083018	Dissolved	Water	6020B	552218
460-163741-12	RW-3DD(175-180)-083018	Dissolved	Water	6020B	552218
460-163741-13	RW-3(77-87)-083018	Dissolved	Water	6020B	552218
460-163741-14	RW-4(333-343)-083018	Dissolved	Water	6020B	552218
460-163741-15	RW-4(393-403)-083018	Dissolved	Water	6020B	552218
460-163741-16	RW-4A(62-72)-083018	Dissolved	Water	6020B	552218
460-163741-18	RW-4A-(113-123)-083018	Dissolved	Water	6020B	552218
MB 460-550925/1-B	Method Blank	Dissolved	Water	6020B	552218
MB 460-550925/1-B	Method Blank	Dissolved	Water	6020B	552218
LCS 460-552218/2-A	Lab Control Sample	Total/NA	Water	6020B	552218
460-163741-3 MS	RW-14S(135-155)-083118	Dissolved	Water	6020B	552218
460-163741-3 DU	RW-14S(135-155)-083118	Dissolved	Water	6020B	552218

General Chemistry

Analysis Batch: 549615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	SM 2320B	
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	SM 2320B	
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	SM 2320B	
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	SM 2320B	
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	SM 2320B	
460-163741-6	DUP-04-083118	Total/NA	Water	SM 2320B	
460-163741-7	FB-04-083118	Total/NA	Water	SM 2320B	
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	SM 2320B	
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	SM 2320B	
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	SM 2320B	
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	SM 2320B	
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	SM 2320B	
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	SM 2320B	
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	SM 2320B	
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 549615 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	SM 2320B	
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	SM 2320B	
MB 460-549615/2	Method Blank	Total/NA	Water	SM 2320B	
MB 460-549615/25	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-549615/26	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSSRM 460-549615/3	Lab Control Sample	Total/NA	Water	SM 2320B	
460-163741-3 DU	RW-14S(135-155)-083118	Total/NA	Water	SM 2320B	

Prep Batch: 550885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	9012B	
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	9012B	
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	9012B	
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	9012B	
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	9012B	
460-163741-6	DUP-04-083118	Total/NA	Water	9012B	
460-163741-7	FB-04-083118	Total/NA	Water	9012B	
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	9012B	
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	9012B	
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	9012B	
MB 460-550885/1-A	Method Blank	Total/NA	Water	9012B	
LCS 460-550885/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	9012B	
460-163741-3 MSD	RW-14S(135-155)-083118	Total/NA	Water	9012B	

Prep Batch: 550922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	9012B	
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	9012B	
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	9012B	
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	9012B	
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	9012B	
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	9012B	
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	9012B	
MB 460-550922/1-A	Method Blank	Total/NA	Water	9012B	
LCS 460-550922/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-163741-11 MS	RW-3DS(155-160)-083018	Total/NA	Water	9012B	
460-163741-11 MSD	RW-3DS(155-160)-083018	Total/NA	Water	9012B	

Analysis Batch: 550966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-1	RW-11S(236-241)-083118	Total/NA	Water	9012B	550885
460-163741-2	RW-11D(262-267)-083118	Total/NA	Water	9012B	550885
460-163741-3	RW-14S(135-155)-083118	Total/NA	Water	9012B	550885
460-163741-4	RW-15S(110-120)-083118	Total/NA	Water	9012B	550885
460-163741-5	RW-15D(127-137)-083118	Total/NA	Water	9012B	550885
460-163741-6	DUP-04-083118	Total/NA	Water	9012B	550885
460-163741-7	FB-04-083118	Total/NA	Water	9012B	550885
460-163741-8	RW-14D(175-185)-083118	Total/NA	Water	9012B	550885
460-163741-9	RW-13(150-170)-083018	Total/NA	Water	9012B	550885
460-163741-10	RW-13(100-120)-083018	Total/NA	Water	9012B	550885

General Chemistry (Continued)

Analysis Batch: 550966 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-163741-11	RW-3DS(155-160)-083018	Total/NA	Water	9012B	550922
460-163741-12	RW-3DD(175-180)-083018	Total/NA	Water	9012B	550922
460-163741-13	RW-3(77-87)-083018	Total/NA	Water	9012B	550922
460-163741-14	RW-4(333-343)-083018	Total/NA	Water	9012B	550922
460-163741-15	RW-4(393-403)-083018	Total/NA	Water	9012B	550922
460-163741-16	RW-4A(62-72)-083018	Total/NA	Water	9012B	550922
460-163741-18	RW-4A-(113-123)-083018	Total/NA	Water	9012B	550922
MB 460-550885/1-A	Method Blank	Total/NA	Water	9012B	550885
MB 460-550922/1-A	Method Blank	Total/NA	Water	9012B	550922
LCS 460-550885/2-A	Lab Control Sample	Total/NA	Water	9012B	550885
LCS 460-550922/2-A	Lab Control Sample	Total/NA	Water	9012B	550922
460-163741-3 MS	RW-14S(135-155)-083118	Total/NA	Water	9012B	550885
460-163741-3 MSD	RW-14S(135-155)-083118	Total/NA	Water	9012B	550885
460-163741-11 MS	RW-3DS(155-160)-083018	Total/NA	Water	9012B	550922
460-163741-11 MSD	RW-3DS(155-160)-083018	Total/NA	Water	9012B	550922

Client Sample ID: RW-11S(236-241)-083118

Lab Sample ID: 460-163741-1

Date Collected: 08/31/18 10:30

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/04/18 22:27	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551171	09/11/18 13:50	SZD	TAL EDI
Total/NA	Prep	3510C			549338	09/02/18 06:57	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549364	09/02/18 20:02	DAN	TAL EDI
Total/NA	Prep	3510C			549338	09/02/18 06:57	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549391	09/02/18 18:54	SK	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 01:40	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 05:53	JHP	TAL EDI
Total/NA	Analysis	9056A		1	549578	09/04/18 18:22	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 11:57	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/13/18 23:17	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 10:38	TJS	TAL EDI
Total/NA	Prep	7470A			550265	09/07/18 05:18	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 09:17	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:08	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 12:16	PHM	TAL EDI

Client Sample ID: RW-11D(262-267)-083118

Lab Sample ID: 460-163741-2

Date Collected: 08/31/18 10:15

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/04/18 22:50	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551171	09/11/18 14:13	SZD	TAL EDI
Total/NA	Prep	3510C			549338	09/02/18 06:57	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549364	09/02/18 20:23	DAN	TAL EDI
Total/NA	Prep	3510C			549338	09/02/18 06:57	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549391	09/02/18 19:15	SK	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 01:58	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 06:17	JHP	TAL EDI
Total/NA	Analysis	9056A		1	549578	09/04/18 18:35	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	13	549836	09/05/18 09:50	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI

Client Sample ID: RW-11D(262-267)-083118

Lab Sample ID: 460-163741-2

Date Collected: 08/31/18 10:15

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 11:59	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/13/18 23:21	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 10:40	TJS	TAL EDI
Total/NA	Prep	7470A			550265	09/07/18 05:18	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 09:18	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:09	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 12:30	PHM	TAL EDI

Client Sample ID: RW-14S(135-155)-083118

Lab Sample ID: 460-163741-3

Date Collected: 08/31/18 12:15

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/04/18 23:14	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551357	09/11/18 22:55	XXC	TAL EDI
Total/NA	Prep	3510C			549338	09/02/18 06:57	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549364	09/02/18 18:59	DAN	TAL EDI
Total/NA	Prep	3510C			549338	09/02/18 06:57	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549391	09/02/18 19:37	SK	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 00:46	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 12:14	JHP	TAL EDI
Total/NA	Analysis	9056A		1	549578	09/04/18 16:51	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	15	549836	09/05/18 08:57	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 11:51	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	551612	09/12/18 14:16	MDC	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 10:28	TJS	TAL EDI
Total/NA	Prep	7470A			550265	09/07/18 05:18	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 08:51	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:10	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 11:20	PHM	TAL EDI

Client Sample ID: RW-15S(110-120)-083118

Lab Sample ID: 460-163741-4

Date Collected: 08/31/18 13:20

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/04/18 23:38	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551171	09/11/18 14:36	SZD	TAL EDI
Total/NA	Prep	3510C			549791	09/05/18 10:46	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549905	09/06/18 02:26	SK	TAL EDI
Total/NA	Prep	3510C			549338	09/02/18 06:57	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549391	09/02/18 19:58	SK	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 02:15	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 06:40	JHP	TAL EDI
Total/NA	Analysis	9056A	DL	8	549836	09/05/18 10:30	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 12:05	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/13/18 23:31	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 10:42	TJS	TAL EDI
Total/NA	Prep	7470A			550265	09/07/18 05:18	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 09:20	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:16	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 12:39	PHM	TAL EDI

Client Sample ID: RW-15D(127-137)-083118

Lab Sample ID: 460-163741-5

Date Collected: 08/31/18 14:00

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/05/18 00:02	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551171	09/11/18 15:00	SZD	TAL EDI
Total/NA	Prep	3510C			549338	09/02/18 06:57	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549364	09/02/18 21:05	DAN	TAL EDI
Total/NA	Prep	3510C			549338	09/02/18 06:57	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549391	09/02/18 20:19	SK	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 02:33	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 07:04	JHP	TAL EDI
Total/NA	Analysis	9056A	DL	17	549836	09/05/18 10:43	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI

Client Sample ID: RW-15D(127-137)-083118

Lab Sample ID: 460-163741-5

Date Collected: 08/31/18 14:00

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020B		2	552232	09/14/18 12:15	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/13/18 23:41	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 10:44	TJS	TAL EDI
Total/NA	Prep	7470A			550265	09/07/18 05:18	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 09:22	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:17	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 12:49	PHM	TAL EDI

Client Sample ID: DUP-04-083118

Lab Sample ID: 460-163741-6

Date Collected: 08/31/18 12:00

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/05/18 00:25	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551171	09/11/18 15:23	SZD	TAL EDI
Total/NA	Prep	3510C			549338	09/02/18 06:57	ANM	TAL EDI
Total/NA	Analysis	8270D		1	549364	09/02/18 21:26	DAN	TAL EDI
Total/NA	Prep	3510C			549338	09/02/18 06:57	ANM	TAL EDI
Total/NA	Analysis	8270D SIM		1	549391	09/02/18 20:40	SK	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 02:51	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 07:27	JHP	TAL EDI
Total/NA	Analysis	9056A	DL	8	549836	09/05/18 10:57	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 12:18	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 00:02	VAD	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 05:23	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 10:45	TJS	TAL EDI
Total/NA	Prep	7470A			550265	09/07/18 05:18	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 09:24	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:18	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 12:58	PHM	TAL EDI

Client Sample ID: FB-04-083118

Lab Sample ID: 460-163741-7

Date Collected: 08/31/18 08:00

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/05/18 00:49	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551171	09/11/18 09:58	SZD	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549470	09/04/18 11:48	SK	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549753	09/05/18 11:15	DAN	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 03:09	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 07:50	JHP	TAL EDI
Total/NA	Analysis	9056A		1	549578	09/04/18 20:06	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 12:21	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 00:15	VAD	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 05:37	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 10:47	TJS	TAL EDI
Total/NA	Prep	7470A			550265	09/07/18 05:18	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 09:29	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:19	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 13:06	PHM	TAL EDI

Client Sample ID: RW-14D(175-185)-083118

Lab Sample ID: 460-163741-8

Date Collected: 08/31/18 12:40

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/05/18 01:12	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551171	09/11/18 15:46	SZD	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549470	09/04/18 12:09	SK	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549753	09/05/18 11:37	DAN	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 03:26	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 12:38	JHP	TAL EDI
Total/NA	Analysis	9056A	DL	24	549836	09/05/18 11:10	VMI	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-14D(175-185)-083118

Lab Sample ID: 460-163741-8

Date Collected: 08/31/18 12:40

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 12:23	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 00:19	VAD	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 05:40	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 10:49	TJS	TAL EDI
Total/NA	Prep	7470A			550265	09/07/18 05:18	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 09:30	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:20	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 13:14	PHM	TAL EDI

Client Sample ID: RW-13(150-170)-083018

Lab Sample ID: 460-163741-9

Date Collected: 08/30/18 11:35

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/05/18 01:36	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551032	09/11/18 00:23	XXC	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549470	09/04/18 12:30	SK	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549753	09/05/18 11:58	DAN	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 03:44	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 08:37	JHP	TAL EDI
Total/NA	Analysis	9056A		1	549578	09/04/18 20:58	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	2	549836	09/05/18 11:25	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 12:26	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 00:26	VAD	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 05:47	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 10:50	TJS	TAL EDI

Client Sample ID: RW-13(150-170)-083018

Lab Sample ID: 460-163741-9

Date Collected: 08/30/18 11:35

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			550265	09/07/18 05:18	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 09:32	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:21	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 13:31	PHM	TAL EDI

Client Sample ID: RW-13(100-120)-083018

Lab Sample ID: 460-163741-10

Date Collected: 08/30/18 12:20

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/05/18 02:00	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551032	09/11/18 00:47	XXC	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549470	09/04/18 12:51	SK	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549753	09/05/18 12:20	DAN	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 04:02	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 09:00	JHP	TAL EDI
Total/NA	Analysis	9056A	DL	8	549836	09/05/18 11:52	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 12:29	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 00:46	VAD	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552206	09/14/18 14:51	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 10:52	TJS	TAL EDI
Total/NA	Prep	7470A			550265	09/07/18 05:18	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 09:34	TJS	TAL EDI
Total/NA	Prep	9012B			550885	09/10/18 08:47	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:22	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 13:42	PHM	TAL EDI

Client Sample ID: RW-3DS(155-160)-083018

Lab Sample ID: 460-163741-11

Date Collected: 08/30/18 13:00

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/05/18 02:23	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551032	09/11/18 01:10	XXC	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549470	09/04/18 13:12	SK	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549753	09/05/18 12:41	DAN	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 04:20	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 09:24	JHP	TAL EDI
Total/NA	Analysis	9056A	DL	26	549836	09/05/18 11:38	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 12:31	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 00:56	VAD	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552206	09/14/18 14:56	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 10:54	TJS	TAL EDI
Total/NA	Prep	7470A			550267	09/07/18 05:41	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 10:09	TJS	TAL EDI
Total/NA	Prep	9012B			550922	09/10/18 11:18	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:28	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 13:51	PHM	TAL EDI

Client Sample ID: RW-3DD(175-180)-083018

Lab Sample ID: 460-163741-12

Date Collected: 08/30/18 12:30

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/05/18 02:47	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551032	09/11/18 01:33	XXC	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549470	09/04/18 13:33	SK	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549753	09/05/18 13:02	DAN	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 04:38	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 09:47	JHP	TAL EDI
Total/NA	Analysis	9056A		1	549578	09/04/18 23:21	VMI	TAL EDI

Client Sample ID: RW-3DD(175-180)-083018

Lab Sample ID: 460-163741-12

Date Collected: 08/30/18 12:30

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A	DL	4	549836	09/05/18 13:13	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 12:34	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 01:00	VAD	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552206	09/14/18 14:59	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 10:59	TJS	TAL EDI
Total/NA	Prep	7470A			550267	09/07/18 05:41	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 10:11	TJS	TAL EDI
Total/NA	Prep	9012B			550922	09/10/18 11:18	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:30	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 14:00	PHM	TAL EDI

Client Sample ID: RW-3(77-87)-083018

Lab Sample ID: 460-163741-13

Date Collected: 08/30/18 13:35

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/05/18 03:11	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551032	09/11/18 01:56	XXC	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549470	09/04/18 13:54	SK	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549753	09/05/18 13:24	DAN	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 04:56	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 10:11	JHP	TAL EDI
Total/NA	Analysis	9056A		1	549578	09/04/18 23:34	VMI	TAL EDI
Total/NA	Analysis	9056A	DL	3	549836	09/05/18 13:27	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 12:39	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 01:03	VAD	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552206	09/14/18 15:02	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-3(77-87)-083018

Date Collected: 08/30/18 13:35
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	550393	09/07/18 11:01	TJS	TAL EDI
Total/NA	Prep	7470A			550267	09/07/18 05:41	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 10:12	TJS	TAL EDI
Total/NA	Prep	9012B			550922	09/10/18 11:18	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:31	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 14:08	PHM	TAL EDI

Client Sample ID: RW-4(333-343)-083018

Date Collected: 08/30/18 15:50
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/05/18 03:34	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551171	09/11/18 16:09	SZD	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549470	09/04/18 14:15	SK	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549753	09/05/18 13:45	DAN	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 05:13	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 10:34	JHP	TAL EDI
Total/NA	Analysis	9056A		1	549578	09/04/18 23:47	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 12:58	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 01:06	VAD	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552206	09/14/18 15:05	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 11:02	TJS	TAL EDI
Total/NA	Prep	7470A			550267	09/07/18 05:41	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 10:18	TJS	TAL EDI
Total/NA	Prep	9012B			550922	09/10/18 11:18	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:32	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 14:19	PHM	TAL EDI

Client Sample ID: RW-4(393-403)-083018

Lab Sample ID: 460-163741-15

Date Collected: 08/30/18 15:20

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/05/18 03:58	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551171	09/11/18 16:32	SZD	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549470	09/04/18 14:36	SK	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549753	09/05/18 14:06	DAN	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 05:31	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 10:58	JHP	TAL EDI
Total/NA	Analysis	9056A		1	549578	09/05/18 00:00	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 13:01	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 01:10	VAD	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552206	09/14/18 15:07	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 11:04	TJS	TAL EDI
Total/NA	Prep	7470A			550267	09/07/18 05:41	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 10:19	TJS	TAL EDI
Total/NA	Prep	9012B			550922	09/10/18 11:18	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:33	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 15:02	PHM	TAL EDI

Client Sample ID: RW-4A(62-72)-083018

Lab Sample ID: 460-163741-16

Date Collected: 08/30/18 14:20

Matrix: Water

Date Received: 08/31/18 19:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/05/18 04:21	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551357	09/11/18 23:18	XXC	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549470	09/04/18 14:57	SK	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549753	09/05/18 14:28	DAN	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 05:49	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 11:21	JHP	TAL EDI
Total/NA	Analysis	9056A		1	549578	09/05/18 00:13	VMI	TAL EDI

Client Sample ID: RW-4A(62-72)-083018

Date Collected: 08/30/18 14:20
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 13:03	MDC	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 01:17	VAD	TAL EDI
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552206	09/14/18 15:13	PHP	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 11:06	TJS	TAL EDI
Total/NA	Prep	7470A			550267	09/07/18 05:41	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 10:21	TJS	TAL EDI
Total/NA	Prep	9012B			550922	09/10/18 11:18	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:34	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 15:09	PHM	TAL EDI

Client Sample ID: TB-06-083118

Date Collected: 08/31/18 00:00
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/04/18 22:03	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551357	09/12/18 02:00	XXC	TAL EDI

Client Sample ID: RW-4A-(113-123)-083018

Date Collected: 08/31/18 14:45
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	549619	09/05/18 04:45	VBP	TAL EDI
Total/NA	Analysis	8260C SIM		1	551357	09/11/18 23:41	XXC	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D		1	549470	09/04/18 15:18	SK	TAL EDI
Total/NA	Prep	3510C			549397	09/02/18 16:51	MIS	TAL EDI
Total/NA	Analysis	8270D SIM		1	549753	09/05/18 14:49	DAN	TAL EDI
Total/NA	Prep	3510C			549535	09/04/18 10:05	ANM	TAL EDI
Total/NA	Analysis	8270D SIM ID		1	549683	09/05/18 06:07	SK	TAL EDI
Total/NA	Prep	3510C			549636	09/04/18 18:44	GXY	TAL EDI
Total/NA	Analysis	8082A		1	550219	09/07/18 11:44	JHP	TAL EDI
Total/NA	Analysis	9056A		1	549578	09/05/18 00:25	VMI	TAL EDI
Dissolved	Filtration	FILTRATION			550925	09/10/18 11:29	MDC	TAL EDI
Dissolved	Prep	3010A			552218	09/14/18 11:10	MDC	TAL EDI
Dissolved	Analysis	6020B		2	552232	09/14/18 13:06	MDC	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Client Sample ID: RW-4A-(113-123)-083018
Date Collected: 08/31/18 14:45
Date Received: 08/31/18 19:30

Lab Sample ID: 460-163741-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			550528	09/08/18 03:00	GAE	TAL EDI
Total/NA	Analysis	6020B		2	552207	09/14/18 01:30	VAD	TAL EDI
Dissolved	Filtration	FILTRATION			550262	09/07/18 04:55	TJS	TAL EDI
Dissolved	Prep	7470A			550280	09/07/18 05:55	TJS	TAL EDI
Dissolved	Analysis	7470A		1	550393	09/07/18 11:08	TJS	TAL EDI
Total/NA	Prep	7470A			550267	09/07/18 05:41	TJS	TAL EDI
Total/NA	Analysis	7470A		1	550393	09/07/18 10:23	TJS	TAL EDI
Total/NA	Prep	9012B			550922	09/10/18 11:18	IAA	TAL EDI
Total/NA	Analysis	9012B		1	550966	09/10/18 13:35	HTV	TAL EDI
Total/NA	Analysis	SM 2320B		1	549615	09/04/18 13:23	PHM	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	12028	06-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	Ethylene Dibromide
8270D SIM	3510C	Water	Bis(2-chloroethyl)ether
9056A		Water	Chloride
9056A		Water	Sulfate

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL EDI
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
9056A	Anions, Ion Chromatography	SW846	TAL EDI
6020B	Metals (ICP/MS)	SW846	TAL EDI
7470A	Mercury (CVAA)	SW846	TAL EDI
9012B	Cyanide, Total andor Amenable	SW846	TAL EDI
SM 2320B	Alkalinity	SM	TAL EDI
3010A	Preparation, Total Metals	SW846	TAL EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI
7470A	Preparation, Mercury	SW846	TAL EDI
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL EDI
FILTRATION	Sample Filtration	None	TAL EDI

Protocol References:

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-163741-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-163741-1	RW-11S(236-241)-083118	Water	08/31/18 10:30	08/31/18 19:30
460-163741-2	RW-11D(262-267)-083118	Water	08/31/18 10:15	08/31/18 19:30
460-163741-3	RW-14S(135-155)-083118	Water	08/31/18 12:15	08/31/18 19:30
460-163741-4	RW-15S(110-120)-083118	Water	08/31/18 13:20	08/31/18 19:30
460-163741-5	RW-15D(127-137)-083118	Water	08/31/18 14:00	08/31/18 19:30
460-163741-6	DUP-04-083118	Water	08/31/18 12:00	08/31/18 19:30
460-163741-7	FB-04-083118	Water	08/31/18 08:00	08/31/18 19:30
460-163741-8	RW-14D(175-185)-083118	Water	08/31/18 12:40	08/31/18 19:30
460-163741-9	RW-13(150-170)-083018	Water	08/30/18 11:35	08/31/18 19:30
460-163741-10	RW-13(100-120)-083018	Water	08/30/18 12:20	08/31/18 19:30
460-163741-11	RW-3DS(155-160)-083018	Water	08/30/18 13:00	08/31/18 19:30
460-163741-12	RW-3DD(175-180)-083018	Water	08/30/18 12:30	08/31/18 19:30
460-163741-13	RW-3(77-87)-083018	Water	08/30/18 13:35	08/31/18 19:30
460-163741-14	RW-4(333-343)-083018	Water	08/30/18 15:50	08/31/18 19:30
460-163741-15	RW-4(393-403)-083018	Water	08/30/18 15:20	08/31/18 19:30
460-163741-16	RW-4A(62-72)-083018	Water	08/30/18 14:20	08/31/18 19:30
460-163741-17	TB-06-083118	Water	08/31/18 00:00	08/31/18 19:30
460-163741-18	RW-4A-(113-123)-083018	Water	08/31/18 14:45	08/31/18 19:30

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice)	Samplers Name (Printed)	Site/Project Identification
Tim Roeper	Dan Wheeler	Ringwood
Company: Cornerstone Environmental Group	P. O. # 180361-006	State (Location of site): NJ: X NY: Other:
		Regulatory Program: DKQP:
Address: 100 Crystal Run Rd, suite 101	Analysis Turnaround Time: Standard X	
City: Middletown State: NY 10941	Rush Charges Authorized For: 2 Week / 1 Week / Other	
Phone: 845-695-0200 Fax:		

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs+15 TICs w/SIM	TCL BNA/SVOCs w/SIM	1,4 Dioxane by Isotope Dilution	PCB's	Chloride	Sulfate	Alkalinity	TAL Metals	Dissolved TAL Metals	Total Cyanide		LAB USE ONLY Project No: Job No: 163741 Sample Numbers
RW-11S(236-241)-083118	8/31/18	1030	GW	15	X	X	X	X	X	X	X	X	X	X		1
RW-11D(262-267)-083118	8/31/18	1015	GW	12	X	X	X	X	X	X	X	X	X	X		2
RW-14S(135-155)-083118	8/31/18	1215	GW	15	X	X	X	X	X	X	X	X	X	X		3
RW-14S(135-155)-083118-MS	8/31/18	1215	GW	15	X	X	X	X	X	X	X	X	X	X		3
RW-14S(135-155)-083118-MSD	8/31/18	1215	GW	15	X	X	X	X	X	X	X	X	X	X		3
RW-15S(110-120)-083118	8/31/18	1320	GW	15	X	X	X	X	X	X	X	X	X	X		4
RW-15D(127-137)-083118	8/31/18	1400	GW	15	X	X	X	X	X	X	X	X	X	X		5
DUP-04-083118	8/31/18	1200	GW	15	X	X	X	X	X	X	X	X				6
FB-04-083118	8/31/18	0900	BW	15	X	X	X	X	X	X	X	X	X	X		7
RW-14D(175-185)-083118	8/31/18	1240	GW	15	X	X	X	X	X	X	X	X	X	X		8
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:																
6 = Other _____, 7 = Other _____ — Water:					2	1	1	1	1	1	1	4	1	5		

Special Instructions * Low yield of gw at RW-11D (262-267) — Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
Daniel Wheeler	Cornerstone	8/31/18 1645	1)	TA
Relinquished by	Company	Date / Time	Received by	Company
2)	TAEDI	8/31 1930	2) Kelly Jo	TAEDI
Relinquished by	Company	Date / Time	Received by	Company
			3)	
		Date / Time	Received by	Company
			4)	

460-163741 Chain of Custody

28), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

2.4°c 2.3°c 2.4°c 3.0°c 2.1°c 2.1°c 2.0°c

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice)	Samplers Name (Printed)	Site/Project Identification
Tim Roeper	Dan Wheeler	Ringwood
Company: Cornerstone Environmental Group	P. O. # 180361-006	State (Location of site): NJ: X NY: Other:
		Regulatory Program: DKQP:
Address: 100 Crystal Run Rd, suite 101	Analysis Turnaround Time: Standard X	
City: Middletown State: NY 10941	Rush Charges Authorized For: 2 Week / 1 Week / Other	
Phone: 845-695-0200 Fax:		

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs + 15 TICs W/SIM	TCL BNA/SVOCs W/SIM	1,4 Dioxane by Isotope dilution	PCB's	Chloride	Sulfate	Alkalinity	TAL Metals	TAL Metals Dissolved	Total Cyanide	Sample Numbers
RW-13(150-170)-083018	8.30.18	1135	GW	15	X	X	X	X	X	X	X	X	X	X	9
RW-13(100-120)-083018	8.30.18	1220	GW	12	X	X	X	X	X	X	X	X	X	X	10
RW-3DS(155-160)-083018	8.30.18	1300	GW	12	X	X	X	X	X	X	X	X	X	X	11
RW-3DD(175-180)-083018	8.30.18	1230	GW	15	X	X	X	X	X	X	X	X	X	X	12
RW-3(77-87)-083018	8.30.18	1335	GW	15	X	X	X	X	X	X	X	X	X	X	13
RW-4(333-343)-083018	8.30.18	1550	GW	15	X	X	X	X	X	X	X	X	X	X	14
RW-4(393-403)-083018	8.30.18	1520	GW	15	X	X	X	X	X	X	X	X	X	X	15
RW-4A(62-72)-083018	8/30/18	1420	GW	15	X	X	X	X	X	X	X	X	X	X	16
TB-06-083118	8/31/18	-	BW	3	X										17
RW-4A-(113-123)-083018	8/31/18	1445	GW	15	X	X	X	X	X	X	X	X	X	X	18

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____ Soil: Water:

LAB USE ONLY
Project No:
Job No: 163741

Special Instructions * Low yield of gw at RW-13(100-120), RW-3DS(155-160) Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1) Daniel Wheeler	Cornerstone	8/31/1645	1)	TAEDL
Relinquished by	Company	Date / Time	Received by	Company
2)	TAEDL	8/31/1930	2)	TAEDL
Relinquished by	Company	Date / Time	Received by	Company
3)		/	3)	
Relinquished by	Company	Date / Time	Received by	Company
4)		/	4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 163741

Number of Coolers: 7 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED
Cooler #1:	2.4 °C	°C
Cooler #2:	2.3 °C	°C
Cooler #3:	2.4 °C	°C
Cooler #4:	3.0 °C	°C
Cooler #5:	2.1 °C	°C
Cooler #6:	2.1 °C	°C
Cooler #7:	2.0 °C	°C
Cooler #8:	°C	°C
Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1				<2								>12			
2				<2								>12			
3				<2								>12			
3DUPMSD				<2								>12			
3MS				<2								>12			
4				<2								>12			
5				<2								>12			
6				<2								>12			
7				<2								>12			
8				<2								>12			
9				<2								>12			
10				<2								>12			
11				<2								>12			

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

* *Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ Date: 8/31/18

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 163741

Number of Coolers: 9 IR Gun #: _____

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.4 °C	°C	Cooler #4:	3.0 °C	°C	Cooler #7:	2.0 °C	°C
Cooler #2:	2.3 °C	°C	Cooler #5:	2.1 °C	°C	Cooler #8:	°C	°C
Cooler #3:	2.4 °C	°C	Cooler #6:	2.2 °C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
12				<2								>12			
13				<2								>12			
14				<2								>12			
15				<2								>12			
16				<2								>12			
18				<2								>12			

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ **Date:** 8/31/18

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 460-163741-1

Login Number: 163741
List Number: 1
Creator: Rivera, Kenneth

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Refer to Job Narrative for details.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	Refer to Job Narrative for details.
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-164119-1
Client Project/Site: FORD Ringwood Mines E203361

For:
Cornerstone Environmental Group, LLC
100 Crystal Run Road
Suite 101
Middletown, New York 10941

Attn: Dr. Tim Roeper

Authorized for release by:
9/17/2018 9:54:01 AM

Marie Meidhof, Senior Project Manager
(732)549-3900
marie.meidhof@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-164119-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-164119-1

Laboratory: TestAmerica Edison

Narrative

CASE NARRATIVE

Client: Cornerstone Environmental Group, LLC

Project: FORD Ringwood Mines E203361

Report Number: 460-164119-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 9/6/2018 3:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7º C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples CMS-50-090518 (460-164119-1), RW-6-090518 (460-164119-2), CMS-100-090518 (460-164119-3), CMS-160-090518 (460-164119-4), OB-20B-090518 (460-164119-5), RW-6A-090518 (460-164119-6), CMS-27S-090518 (460-164119-7), SC-01-090518 (460-164119-8) and TB-01-09052018 (460-164119-9) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C DKQP. The samples were analyzed on 09/14/2018.

The continuing calibration verification (CCV) analyzed in batch 460-552087 was outside the method criteria for the following analyte: Bromomethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The CCV analyzed in batch 460-552301 was outside the method criteria for the following analytes: Bromomethane. Bromomethane minimum response factor (RF) was below required limit. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

Job ID: 460-164119-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

VOLATILE ORGANIC COMPOUNDS (GC-MS) - SELECTED ION MODE (SIM) DKQP

Samples CMS-50-090518 (460-164119-1), RW-6-090518 (460-164119-2), CMS-100-090518 (460-164119-3), CMS-160-090518 (460-164119-4), OB-20B-090518 (460-164119-5), RW-6A-090518 (460-164119-6), CMS-27S-090518 (460-164119-7), SC-01-090518 (460-164119-8) and TB-01-09052018 (460-164119-9) were analyzed for volatile organic compounds (GC-MS) - Selected Ion Mode (SIM) DKQP in accordance with EPA SW-846 Method 8260C SIM DKQP. The samples were analyzed on 09/12/2018.

No difficulties were encountered during the VOA SIM DKQP analysis.

All quality control parameters were within the acceptance limits.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-164119-1

Client Sample ID: CMS-50-090518 — Lab Sample ID: 460-164119-1

No Detections.

Client Sample ID: RW-6-090518 — Lab Sample ID: 460-164119-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.40	J	1.0	0.26	ug/L	1		8260C	Total/NA
Benzene	1.3		1.0	0.43	ug/L	1		8260C	Total/NA
Chloroethane	3.5		1.0	0.32	ug/L	1		8260C	Total/NA
Cyclohexane	0.36	J	1.0	0.32	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.28	J	1.0	0.26	ug/L	1		8260C	Total/NA
Toluene	1.0		1.0	0.38	ug/L	1		8260C	Total/NA

Client Sample ID: CMS-100-090518 — Lab Sample ID: 460-164119-3

No Detections.

Client Sample ID: CMS-160-090518 — Lab Sample ID: 460-164119-4

No Detections.

Client Sample ID: OB-20B-090518 — Lab Sample ID: 460-164119-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	1.1		1.0	0.32	ug/L	1		8260C	Total/NA
Cyclohexane	0.87	J	1.0	0.32	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.47	J	1.0	0.26	ug/L	1		8260C	Total/NA

Client Sample ID: RW-6A-090518 — Lab Sample ID: 460-164119-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.32	J	1.0	0.26	ug/L	1		8260C	Total/NA
Benzene	0.90	J	1.0	0.43	ug/L	1		8260C	Total/NA
Chloroethane	1.4		1.0	0.32	ug/L	1		8260C	Total/NA
Cyclohexane	0.42	J	1.0	0.32	ug/L	1		8260C	Total/NA

Client Sample ID: CMS-27S-090518 — Lab Sample ID: 460-164119-7

No Detections.

Client Sample ID: SC-01-090518 — Lab Sample ID: 460-164119-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.6		1.0	0.43	ug/L	1		8260C	Total/NA
Chloroethane	1.3		1.0	0.32	ug/L	1		8260C	Total/NA
Cyclohexane	1.5		1.0	0.32	ug/L	1		8260C	Total/NA
Dichlorodifluoromethane	0.58	J	1.0	0.12	ug/L	1		8260C	Total/NA
Ethylbenzene	0.34	J	1.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	1.5		1.0	0.34	ug/L	1		8260C	Total/NA
Methylcyclohexane	1.2		1.0	0.26	ug/L	1		8260C	Total/NA
Toluene	0.43	J	1.0	0.38	ug/L	1		8260C	Total/NA
Xylenes, Total	66		2.0	0.65	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-164119-1

Client Sample ID: TB-01-09052018 **Lab Sample ID: 460-164119-9**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: CMS-50-090518
Date Collected: 09/05/18 10:10
Date Received: 09/06/18 15:10

Lab Sample ID: 460-164119-1
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/12/18 02:47	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/12/18 02:47	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/12/18 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*09/12/18 02:47*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/14/18 15:06	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/14/18 15:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/14/18 15:06	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 15:06	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/14/18 15:06	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/14/18 15:06	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/14/18 15:06	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/14/18 15:06	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/14/18 15:06	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 15:06	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/14/18 15:06	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/14/18 15:06	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/14/18 15:06	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/14/18 15:06	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/14/18 15:06	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/14/18 15:06	1
Acetone	5.0	U	5.0	5.0	ug/L			09/14/18 15:06	1
Benzene	0.43	U	1.0	0.43	ug/L			09/14/18 15:06	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/14/18 15:06	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/14/18 15:06	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/14/18 15:06	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/14/18 15:06	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/14/18 15:06	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/14/18 15:06	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/14/18 15:06	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/14/18 15:06	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/14/18 15:06	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/14/18 15:06	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/14/18 15:06	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/14/18 15:06	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/14/18 15:06	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/14/18 15:06	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/14/18 15:06	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/14/18 15:06	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/14/18 15:06	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/14/18 15:06	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/14/18 15:06	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/14/18 15:06	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/14/18 15:06	1
Styrene	0.42	U	1.0	0.42	ug/L			09/14/18 15:06	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/14/18 15:06	1

Client Sample ID: CMS-50-090518

Lab Sample ID: 460-164119-1
Date Collected: 09/05/18 10:10
Matrix: Water
Date Received: 09/06/18 15:10

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.38	U	1.0	0.38	ug/L			09/14/18 15:06	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/14/18 15:06	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/14/18 15:06	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/14/18 15:06	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/14/18 15:06	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/14/18 15:06	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/14/18 15:06	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Isopropyl alcohol	*43*		*ug/L*		*2.49*	*67-63-0*		*09/14/18 15:06*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*09/14/18 15:06*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*09/14/18 15:06*	*1*
4-Bromofluorobenzene	*91*		*70 - 130*		*09/14/18 15:06*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*		*09/14/18 15:06*	*1*
Toluene-d8 (Surr)	*113*		*70 - 130*		*09/14/18 15:06*	*1*

Client Sample ID: RW-6-090518

Lab Sample ID: 460-164119-2
Date Collected: 09/05/18 10:15
Matrix: Water
Date Received: 09/06/18 15:10

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/12/18 03:10	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/12/18 03:10	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/12/18 03:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*70 - 130*		*09/12/18 03:10*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/14/18 15:33	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/14/18 15:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/14/18 15:33	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 15:33	1
1,1-Dichloroethane	**0.40**	**J**	1.0	0.26	ug/L			09/14/18 15:33	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/14/18 15:33	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/14/18 15:33	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/14/18 15:33	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/14/18 15:33	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 15:33	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/14/18 15:33	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/14/18 15:33	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/14/18 15:33	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/14/18 15:33	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/14/18 15:33	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/14/18 15:33	1
Acetone	5.0	U	5.0	5.0	ug/L			09/14/18 15:33	1
Benzene	**1.3**		1.0	0.43	ug/L			09/14/18 15:33	1

Client Sample ID: RW-6-090518

Date Collected: 09/05/18 10:15
Date Received: 09/06/18 15:10

Lab Sample ID: 460-164119-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	0.54	U	1.0	0.54	ug/L			09/14/18 15:33	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/14/18 15:33	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/14/18 15:33	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/14/18 15:33	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/14/18 15:33	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/14/18 15:33	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/14/18 15:33	1
Chloroethane	**3.5**		1.0	0.32	ug/L			09/14/18 15:33	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/14/18 15:33	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/14/18 15:33	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/14/18 15:33	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/14/18 15:33	1
Cyclohexane	**0.36**	**J**	1.0	0.32	ug/L			09/14/18 15:33	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/14/18 15:33	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/14/18 15:33	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/14/18 15:33	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/14/18 15:33	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/14/18 15:33	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/14/18 15:33	1
Methylcyclohexane	**0.28**	**J**	1.0	0.26	ug/L			09/14/18 15:33	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/14/18 15:33	1
Styrene	0.42	U	1.0	0.42	ug/L			09/14/18 15:33	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/14/18 15:33	1
Toluene	**1.0**		1.0	0.38	ug/L			09/14/18 15:33	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/14/18 15:33	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/14/18 15:33	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/14/18 15:33	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/14/18 15:33	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/14/18 15:33	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/14/18 15:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/14/18 15:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*09/14/18 15:33*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/14/18 15:33*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*		*09/14/18 15:33*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*09/14/18 15:33*	*1*

Client Sample ID: CMS-100-090518

Date Collected: 09/05/18 11:05
Date Received: 09/06/18 15:10

Lab Sample ID: 460-164119-3

Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/12/18 03:33	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/12/18 03:33	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/12/18 03:33	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-164119-1

Client Sample ID: CMS-100-090518
Date Collected: 09/05/18 11:05
Date Received: 09/06/18 15:10

Lab Sample ID: 460-164119-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*93*		*70 - 130*		*09/12/18 03:33*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/14/18 16:00	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/14/18 16:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/14/18 16:00	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 16:00	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/14/18 16:00	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/14/18 16:00	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/14/18 16:00	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/14/18 16:00	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/14/18 16:00	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 16:00	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/14/18 16:00	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/14/18 16:00	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/14/18 16:00	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/14/18 16:00	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/14/18 16:00	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/14/18 16:00	1
Acetone	5.0	U	5.0	5.0	ug/L			09/14/18 16:00	1
Benzene	0.43	U	1.0	0.43	ug/L			09/14/18 16:00	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/14/18 16:00	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/14/18 16:00	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/14/18 16:00	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/14/18 16:00	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/14/18 16:00	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/14/18 16:00	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/14/18 16:00	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/14/18 16:00	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/14/18 16:00	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/14/18 16:00	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/14/18 16:00	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/14/18 16:00	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/14/18 16:00	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/14/18 16:00	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/14/18 16:00	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/14/18 16:00	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/14/18 16:00	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/14/18 16:00	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/14/18 16:00	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/14/18 16:00	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/14/18 16:00	1
Styrene	0.42	U	1.0	0.42	ug/L			09/14/18 16:00	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/14/18 16:00	1
Toluene	0.38	U	1.0	0.38	ug/L			09/14/18 16:00	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/14/18 16:00	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/14/18 16:00	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/14/18 16:00	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/14/18 16:00	1

Client Sample ID: CMS-100-090518

Date Collected: 09/05/18 11:05
Date Received: 09/06/18 15:10

Lab Sample ID: 460-164119-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/14/18 16:00	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/14/18 16:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/14/18 16:00*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*09/14/18 16:00*	*1*
4-Bromofluorobenzene	*94*		*70 - 130*		*09/14/18 16:00*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*		*09/14/18 16:00*	*1*
Toluene-d8 (Surr)	*112*		*70 - 130*		*09/14/18 16:00*	*1*

Client Sample ID: CMS-160-090518

Date Collected: 09/05/18 12:05
Date Received: 09/06/18 15:10

Lab Sample ID: 460-164119-4
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/12/18 03:56	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/12/18 03:56	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/12/18 03:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*70 - 130*		*09/12/18 03:56*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/14/18 16:27	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/14/18 16:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/14/18 16:27	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 16:27	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/14/18 16:27	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/14/18 16:27	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/14/18 16:27	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/14/18 16:27	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/14/18 16:27	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 16:27	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/14/18 16:27	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/14/18 16:27	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/14/18 16:27	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/14/18 16:27	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/14/18 16:27	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/14/18 16:27	1
Acetone	5.0	U	5.0	5.0	ug/L			09/14/18 16:27	1
Benzene	0.43	U	1.0	0.43	ug/L			09/14/18 16:27	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/14/18 16:27	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/14/18 16:27	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/14/18 16:27	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/14/18 16:27	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/14/18 16:27	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/14/18 16:27	1

Client Sample ID: CMS-160-090518

Date Collected: 09/05/18 12:05
Date Received: 09/06/18 15:10

Lab Sample ID: 460-164119-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/14/18 16:27	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/14/18 16:27	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/14/18 16:27	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/14/18 16:27	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/14/18 16:27	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/14/18 16:27	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/14/18 16:27	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/14/18 16:27	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/14/18 16:27	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/14/18 16:27	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/14/18 16:27	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/14/18 16:27	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/14/18 16:27	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/14/18 16:27	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/14/18 16:27	1
Styrene	0.42	U	1.0	0.42	ug/L			09/14/18 16:27	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/14/18 16:27	1
Toluene	0.38	U	1.0	0.38	ug/L			09/14/18 16:27	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/14/18 16:27	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/14/18 16:27	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/14/18 16:27	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/14/18 16:27	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/14/18 16:27	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/14/18 16:27	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/14/18 16:27*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*09/14/18 16:27*	*1*
4-Bromofluorobenzene	*92*		*70 - 130*		*09/14/18 16:27*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*09/14/18 16:27*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*		*09/14/18 16:27*	*1*

Client Sample ID: OB-20B-090518

Date Collected: 09/05/18 11:30
Date Received: 09/06/18 15:10

Lab Sample ID: 460-164119-5
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/12/18 04:19	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/12/18 04:19	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/12/18 04:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*70 - 130*		*09/12/18 04:19*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/14/18 21:10	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/14/18 21:10	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-164119-1

Client Sample ID: OB-20B-090518
Date Collected: 09/05/18 11:30
Date Received: 09/06/18 15:10

Lab Sample ID: 460-164119-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/14/18 21:10	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 21:10	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/14/18 21:10	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/14/18 21:10	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/14/18 21:10	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/14/18 21:10	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/14/18 21:10	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 21:10	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/14/18 21:10	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/14/18 21:10	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/14/18 21:10	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/14/18 21:10	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/14/18 21:10	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/14/18 21:10	1
Acetone	5.0	U	5.0	5.0	ug/L			09/14/18 21:10	1
Benzene	0.43	U	1.0	0.43	ug/L			09/14/18 21:10	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/14/18 21:10	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/14/18 21:10	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/14/18 21:10	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/14/18 21:10	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/14/18 21:10	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/14/18 21:10	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/14/18 21:10	1
Chloroethane	**1.1**		1.0	0.32	ug/L			09/14/18 21:10	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/14/18 21:10	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/14/18 21:10	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/14/18 21:10	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/14/18 21:10	1
Cyclohexane	**0.87**	**J**	1.0	0.32	ug/L			09/14/18 21:10	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/14/18 21:10	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/14/18 21:10	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/14/18 21:10	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/14/18 21:10	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/14/18 21:10	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/14/18 21:10	1
Methylcyclohexane	**0.47**	**J**	1.0	0.26	ug/L			09/14/18 21:10	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/14/18 21:10	1
Styrene	0.42	U	1.0	0.42	ug/L			09/14/18 21:10	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/14/18 21:10	1
Toluene	0.38	U	1.0	0.38	ug/L			09/14/18 21:10	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/14/18 21:10	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/14/18 21:10	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/14/18 21:10	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/14/18 21:10	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/14/18 21:10	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/14/18 21:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Indane	*5.2*	*J N*	*ug/L*		*10.79*	*496-11-7*		*09/14/18 21:10*	*1*

Client Sample ID: OB-20B-090518

Lab Sample ID: 460-164119-5

Date Collected: 09/05/18 11:30

Matrix: Water

Date Received: 09/06/18 15:10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*09/14/18 21:10*	*1*
4-Bromofluorobenzene	*92*		*70 - 130*		*09/14/18 21:10*	*1*
Dibromofluoromethane (Surr)	*118*		*70 - 130*		*09/14/18 21:10*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*		*09/14/18 21:10*	*1*

Client Sample ID: RW-6A-090518

Lab Sample ID: 460-164119-6

Date Collected: 09/05/18 13:15

Matrix: Water

Date Received: 09/06/18 15:10

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/12/18 04:43	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/12/18 04:43	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/12/18 04:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*70 - 130*		*09/12/18 04:43*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/14/18 21:37	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/14/18 21:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/14/18 21:37	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 21:37	1
1,1-Dichloroethane	**0.32**	**J**	1.0	0.26	ug/L			09/14/18 21:37	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/14/18 21:37	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/14/18 21:37	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/14/18 21:37	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/14/18 21:37	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 21:37	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/14/18 21:37	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/14/18 21:37	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/14/18 21:37	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/14/18 21:37	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/14/18 21:37	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/14/18 21:37	1
Acetone	5.0	U	5.0	5.0	ug/L			09/14/18 21:37	1
Benzene	**0.90**	**J**	1.0	0.43	ug/L			09/14/18 21:37	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/14/18 21:37	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/14/18 21:37	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/14/18 21:37	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/14/18 21:37	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/14/18 21:37	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/14/18 21:37	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/14/18 21:37	1
Chloroethane	**1.4**		1.0	0.32	ug/L			09/14/18 21:37	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/14/18 21:37	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/14/18 21:37	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/14/18 21:37	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/14/18 21:37	1
Cyclohexane	**0.42**	**J**	1.0	0.32	ug/L			09/14/18 21:37	1

Client Sample ID: RW-6A-090518

Lab Sample ID: 460-164119-6

Date Collected: 09/05/18 13:15

Matrix: Water

Date Received: 09/06/18 15:10

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/14/18 21:37	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/14/18 21:37	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/14/18 21:37	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/14/18 21:37	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/14/18 21:37	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/14/18 21:37	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/14/18 21:37	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/14/18 21:37	1
Styrene	0.42	U	1.0	0.42	ug/L			09/14/18 21:37	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/14/18 21:37	1
Toluene	0.38	U	1.0	0.38	ug/L			09/14/18 21:37	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/14/18 21:37	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/14/18 21:37	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/14/18 21:37	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/14/18 21:37	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/14/18 21:37	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/14/18 21:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/14/18 21:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*09/14/18 21:37*	*1*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/14/18 21:37*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*		*09/14/18 21:37*	*1*
Toluene-d8 (Surr)	*115*		*70 - 130*		*09/14/18 21:37*	*1*

Client Sample ID: CMS-27S-090518

Lab Sample ID: 460-164119-7

Date Collected: 09/05/18 13:00

Matrix: Water

Date Received: 09/06/18 15:10

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/12/18 05:06	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/12/18 05:06	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/12/18 05:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*70 - 130*		*09/12/18 05:06*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/14/18 22:04	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/14/18 22:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/14/18 22:04	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 22:04	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/14/18 22:04	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/14/18 22:04	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/14/18 22:04	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/14/18 22:04	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/14/18 22:04	1

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-164119-1

Client Sample ID: CMS-27S-090518
Date Collected: 09/05/18 13:00
Date Received: 09/06/18 15:10

Lab Sample ID: 460-164119-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 22:04	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/14/18 22:04	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/14/18 22:04	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/14/18 22:04	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/14/18 22:04	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/14/18 22:04	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/14/18 22:04	1
Acetone	5.0	U	5.0	5.0	ug/L			09/14/18 22:04	1
Benzene	0.43	U	1.0	0.43	ug/L			09/14/18 22:04	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/14/18 22:04	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/14/18 22:04	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/14/18 22:04	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/14/18 22:04	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/14/18 22:04	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/14/18 22:04	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/14/18 22:04	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/14/18 22:04	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/14/18 22:04	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/14/18 22:04	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/14/18 22:04	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/14/18 22:04	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/14/18 22:04	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/14/18 22:04	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/14/18 22:04	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/14/18 22:04	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/14/18 22:04	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/14/18 22:04	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/14/18 22:04	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/14/18 22:04	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/14/18 22:04	1
Styrene	0.42	U	1.0	0.42	ug/L			09/14/18 22:04	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/14/18 22:04	1
Toluene	0.38	U	1.0	0.38	ug/L			09/14/18 22:04	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/14/18 22:04	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/14/18 22:04	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/14/18 22:04	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/14/18 22:04	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/14/18 22:04	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/14/18 22:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/14/18 22:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*09/14/18 22:04*	*1*
4-Bromofluorobenzene	*92*		*70 - 130*		*09/14/18 22:04*	*1*
Dibromofluoromethane (Surr)	*117*		*70 - 130*		*09/14/18 22:04*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*09/14/18 22:04*	*1*

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-164119-1

Client Sample ID: SC-01-090518
Date Collected: 09/05/18 14:40
Date Received: 09/06/18 15:10

Lab Sample ID: 460-164119-8
Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/12/18 05:29	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/12/18 05:29	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/12/18 05:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*70 - 130*		*09/12/18 05:29*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/14/18 22:31	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/14/18 22:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/14/18 22:31	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 22:31	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/14/18 22:31	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/14/18 22:31	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/14/18 22:31	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/14/18 22:31	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/14/18 22:31	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 22:31	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/14/18 22:31	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/14/18 22:31	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/14/18 22:31	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/14/18 22:31	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/14/18 22:31	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/14/18 22:31	1
Acetone	5.0	U	5.0	5.0	ug/L			09/14/18 22:31	1
Benzene	**1.6**		1.0	0.43	ug/L			09/14/18 22:31	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/14/18 22:31	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/14/18 22:31	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/14/18 22:31	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/14/18 22:31	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/14/18 22:31	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/14/18 22:31	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/14/18 22:31	1
Chloroethane	**1.3**		1.0	0.32	ug/L			09/14/18 22:31	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/14/18 22:31	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/14/18 22:31	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/14/18 22:31	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/14/18 22:31	1
Cyclohexane	**1.5**		1.0	0.32	ug/L			09/14/18 22:31	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/14/18 22:31	1
Dichlorodifluoromethane	**0.58**	**J**	1.0	0.12	ug/L			09/14/18 22:31	1
Ethylbenzene	**0.34**	**J**	1.0	0.30	ug/L			09/14/18 22:31	1
Isopropylbenzene	**1.5**		1.0	0.34	ug/L			09/14/18 22:31	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/14/18 22:31	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/14/18 22:31	1
Methylcyclohexane	**1.2**		1.0	0.26	ug/L			09/14/18 22:31	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/14/18 22:31	1
Styrene	0.42	U	1.0	0.42	ug/L			09/14/18 22:31	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/14/18 22:31	1

Client Sample ID: SC-01-090518

Lab Sample ID: 460-164119-8

Date Collected: 09/05/18 14:40

Matrix: Water

Date Received: 09/06/18 15:10

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**0.43**	**J**	1.0	0.38	ug/L			09/14/18 22:31	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/14/18 22:31	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/14/18 22:31	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/14/18 22:31	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/14/18 22:31	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/14/18 22:31	1
Xylenes, Total	**66**		2.0	0.65	ug/L			09/14/18 22:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzene, 1,2,3-trimethyl-	*8.2*	*J N*	*ug/L*		*10.66*	*526-73-8*		*09/14/18 22:31*	*1*
Benzene, 1,2,3,5-tetramethyl-	*5.9*	*J N*	*ug/L*		*11.37*	*527-53-7*		*09/14/18 22:31*	*1*
Benzene, 2-ethenyl-1,4-dimethyl-	*7.0*	*J N*	*ug/L*		*11.63*	*2039-89-6*		*09/14/18 22:31*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*09/14/18 22:31*	*1*
4-Bromofluorobenzene	*102*		*70 - 130*		*09/14/18 22:31*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*		*09/14/18 22:31*	*1*
Toluene-d8 (Surr)	*112*		*70 - 130*		*09/14/18 22:31*	*1*

Client Sample ID: TB-01-09052018

Lab Sample ID: 460-164119-9

Date Collected: 09/05/18 00:00

Matrix: Water

Date Received: 09/06/18 15:10

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/12/18 02:24	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/12/18 02:24	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/12/18 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*09/12/18 02:24*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/14/18 20:43	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/14/18 20:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/14/18 20:43	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 20:43	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/14/18 20:43	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/14/18 20:43	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/14/18 20:43	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/14/18 20:43	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/14/18 20:43	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 20:43	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/14/18 20:43	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/14/18 20:43	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/14/18 20:43	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/14/18 20:43	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/14/18 20:43	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/14/18 20:43	1
Acetone	5.0	U	5.0	5.0	ug/L			09/14/18 20:43	1

Client Sample ID: TB-01-09052018
Date Collected: 09/05/18 00:00
Date Received: 09/06/18 15:10

Lab Sample ID: 460-164119-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.43	U	1.0	0.43	ug/L			09/14/18 20:43	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/14/18 20:43	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/14/18 20:43	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/14/18 20:43	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/14/18 20:43	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/14/18 20:43	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/14/18 20:43	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/14/18 20:43	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/14/18 20:43	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/14/18 20:43	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/14/18 20:43	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/14/18 20:43	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/14/18 20:43	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/14/18 20:43	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/14/18 20:43	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/14/18 20:43	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/14/18 20:43	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/14/18 20:43	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/14/18 20:43	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/14/18 20:43	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/14/18 20:43	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/14/18 20:43	1
Styrene	0.42	U	1.0	0.42	ug/L			09/14/18 20:43	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/14/18 20:43	1
Toluene	0.38	U	1.0	0.38	ug/L			09/14/18 20:43	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/14/18 20:43	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/14/18 20:43	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/14/18 20:43	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/14/18 20:43	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/14/18 20:43	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/14/18 20:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*09/14/18 20:43*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*09/14/18 20:43*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*		*09/14/18 20:43*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*09/14/18 20:43*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*09/14/18 20:43*	*1*

Surrogate Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-164119-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
460-164119-1	CMS-50-090518	115	91	115	113
460-164119-1 MS	CMS-50-090518	112	101	110	113
460-164119-1 MSD	CMS-50-090518	113	99	114	113
460-164119-2	RW-6-090518	116	93	115	111
460-164119-3	CMS-100-090518	119	94	116	112
460-164119-4	CMS-160-090518	115	92	114	110
460-164119-5	OB-20B-090518	116	92	118	110
460-164119-6	RW-6A-090518	117	95	115	115
460-164119-7	CMS-27S-090518	116	92	117	111
460-164119-8	SC-01-090518	116	102	116	112
460-164119-9	TB-01-09052018	112	93	112	111
LCS 460-552087/3	Lab Control Sample	103	100	105	107
LCS 460-552301/3	Lab Control Sample	110	98	112	111
LCSD 460-552301/4	Lab Control Sample Dup	110	102	110	113
MB 460-552087/7	Method Blank	88	80	89	89
MB 460-552301/7	Method Blank	113	95	114	111

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(70-130)
460-164119-1	CMS-50-090518	96
460-164119-1 MS	CMS-50-090518	94
460-164119-1 MSD	CMS-50-090518	94
460-164119-2	RW-6-090518	87
460-164119-3	CMS-100-090518	93
460-164119-4	CMS-160-090518	91
460-164119-5	OB-20B-090518	79
460-164119-6	RW-6A-090518	77
460-164119-7	CMS-27S-090518	89
460-164119-8	SC-01-090518	75
460-164119-9	TB-01-09052018	95
LCS 460-551357/5	Lab Control Sample	93
MB 460-551357/8	Method Blank	96

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-552087/7
Matrix: Water
Analysis Batch: 552087

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/14/18 07:29	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/14/18 07:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/14/18 07:29	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 07:29	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/14/18 07:29	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/14/18 07:29	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/14/18 07:29	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/14/18 07:29	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/14/18 07:29	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 07:29	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/14/18 07:29	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/14/18 07:29	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/14/18 07:29	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/14/18 07:29	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/14/18 07:29	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/14/18 07:29	1
Acetone	5.0	U	5.0	5.0	ug/L			09/14/18 07:29	1
Benzene	0.43	U	1.0	0.43	ug/L			09/14/18 07:29	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/14/18 07:29	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/14/18 07:29	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/14/18 07:29	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/14/18 07:29	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/14/18 07:29	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/14/18 07:29	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/14/18 07:29	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/14/18 07:29	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/14/18 07:29	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/14/18 07:29	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/14/18 07:29	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/14/18 07:29	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/14/18 07:29	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/14/18 07:29	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/14/18 07:29	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/14/18 07:29	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/14/18 07:29	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/14/18 07:29	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/14/18 07:29	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/14/18 07:29	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/14/18 07:29	1
Styrene	0.42	U	1.0	0.42	ug/L			09/14/18 07:29	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/14/18 07:29	1
Toluene	0.38	U	1.0	0.38	ug/L			09/14/18 07:29	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/14/18 07:29	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/14/18 07:29	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/14/18 07:29	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/14/18 07:29	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/14/18 07:29	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/14/18 07:29	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					09/14/18 07:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 130		09/14/18 07:29	1
4-Bromofluorobenzene	80		70 - 130		09/14/18 07:29	1
Dibromofluoromethane (Surr)	89		70 - 130		09/14/18 07:29	1
Toluene-d8 (Surr)	89		70 - 130		09/14/18 07:29	1

Lab Sample ID: LCS 460-552087/3
Matrix: Water
Analysis Batch: 552087

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.2		ug/L		101	70 - 130
1,1,2,2-Tetrachloroethane	20.0	20.3		ug/L		101	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.7		ug/L		104	70 - 130
1,1,2-Trichloroethane	20.0	20.6		ug/L		103	70 - 130
1,1-Dichloroethane	20.0	20.9		ug/L		105	70 - 130
1,1-Dichloroethene	20.0	20.7		ug/L		104	70 - 130
1,2,3-Trichlorobenzene	20.0	21.1		ug/L		105	70 - 130
1,2,4-Trichlorobenzene	20.0	19.7		ug/L		99	70 - 130
1,2-Dichlorobenzene	20.0	20.3		ug/L		102	70 - 130
1,2-Dichloroethane	20.0	19.6		ug/L		98	70 - 130
1,2-Dichloropropane	20.0	20.9		ug/L		105	70 - 130
1,3-Dichlorobenzene	20.0	19.8		ug/L		99	70 - 130
1,4-Dichlorobenzene	20.0	20.0		ug/L		100	70 - 130
2-Butanone (MEK)	100	107		ug/L		107	40 - 160
2-Hexanone	100	102		ug/L		102	40 - 160
4-Methyl-2-pentanone (MIBK)	100	102		ug/L		102	40 - 160
Acetone	100	108		ug/L		108	40 - 160
Benzene	20.0	21.6		ug/L		108	70 - 130
Bromoform	20.0	19.6		ug/L		98	70 - 130
Bromomethane	20.0	13.7		ug/L		69	40 - 160
Carbon disulfide	20.0	21.2		ug/L		106	40 - 160
Carbon tetrachloride	20.0	20.2		ug/L		101	70 - 130
Chlorobenzene	20.0	20.7		ug/L		104	70 - 130
Chlorobromomethane	20.0	21.6		ug/L		108	70 - 130
Chlorodibromomethane	20.0	20.3		ug/L		102	70 - 130
Chloroethane	20.0	21.5		ug/L		107	40 - 160
Chloroform	20.0	21.1		ug/L		105	70 - 130
Chloromethane	20.0	21.9		ug/L		109	40 - 160
cis-1,2-Dichloroethene	20.0	20.7		ug/L		103	70 - 130
cis-1,3-Dichloropropene	20.0	21.0		ug/L		105	70 - 130
Cyclohexane	20.0	21.7		ug/L		108	70 - 130
Dichlorobromomethane	20.0	20.3		ug/L		102	70 - 130
Dichlorodifluoromethane	20.0	21.5		ug/L		108	40 - 160
Ethylbenzene	20.0	19.9		ug/L		100	70 - 130
Isopropylbenzene	20.0	20.5		ug/L		103	70 - 130
Methyl acetate	40.0	40.5		ug/L		101	70 - 130
Methyl tert-butyl ether	20.0	20.5		ug/L		102	70 - 130
Methylcyclohexane	20.0	20.4		ug/L		102	70 - 130
Methylene Chloride	20.0	21.2		ug/L		106	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-552087/3
Matrix: Water
Analysis Batch: 552087

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	20.0	21.1		ug/L		106	70 - 130
Tetrachloroethene	20.0	19.1		ug/L		96	70 - 130
Toluene	20.0	20.2		ug/L		101	70 - 130
trans-1,2-Dichloroethene	20.0	20.7		ug/L		103	70 - 130
trans-1,3-Dichloropropene	20.0	19.5		ug/L		97	70 - 130
Trichloroethene	20.0	20.9		ug/L		104	70 - 130
Trichlorofluoromethane	20.0	20.3		ug/L		102	40 - 160
Vinyl chloride	20.0	21.9		ug/L		109	70 - 130
Xylenes, Total	40.0	41.1		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

Lab Sample ID: 460-164119-1 MS
Matrix: Water
Analysis Batch: 552087

Client Sample ID: CMS-50-090518
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.24	U	20.0	20.0		ug/L		100	70 - 130
1,1,2,2-Tetrachloroethane	0.37	U	20.0	19.7		ug/L		99	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	20.3		ug/L		101	70 - 130
1,1,2-Trichloroethane	0.43	U	20.0	20.2		ug/L		101	70 - 130
1,1-Dichloroethane	0.26	U	20.0	21.1		ug/L		106	70 - 130
1,1-Dichloroethene	0.12	U	20.0	20.7		ug/L		103	70 - 130
1,2,3-Trichlorobenzene	0.36	U	20.0	16.4		ug/L		82	70 - 130
1,2,4-Trichlorobenzene	0.37	U	20.0	16.9		ug/L		84	70 - 130
1,2-Dichlorobenzene	0.43	U	20.0	19.2		ug/L		96	70 - 130
1,2-Dichloroethane	0.43	U	20.0	19.0		ug/L		95	70 - 130
1,2-Dichloropropane	0.35	U	20.0	20.5		ug/L		103	70 - 130
1,3-Dichlorobenzene	0.34	U	20.0	18.6		ug/L		93	70 - 130
1,4-Dichlorobenzene	0.76	U	20.0	19.1		ug/L		95	70 - 130
2-Butanone (MEK)	1.9	U	100	96.5		ug/L		97	40 - 160
2-Hexanone	2.9	U	100	91.9		ug/L		92	40 - 160
4-Methyl-2-pentanone (MIBK)	2.7	U	100	96.1		ug/L		96	40 - 160
Acetone	5.0	U	100	97.4		ug/L		97	40 - 160
Benzene	0.43	U	20.0	21.1		ug/L		105	70 - 130
Bromoform	0.54	U	20.0	18.9		ug/L		94	70 - 130
Bromomethane	1.0	U	20.0	10.3		ug/L		51	40 - 160
Carbon disulfide	0.16	U	20.0	21.1		ug/L		106	40 - 160
Carbon tetrachloride	0.21	U	20.0	20.7		ug/L		103	70 - 130
Chlorobenzene	0.38	U	20.0	19.2		ug/L		96	70 - 130
Chlorobromomethane	0.41	U	20.0	20.7		ug/L		103	70 - 130
Chlorodibromomethane	0.28	U	20.0	19.1		ug/L		95	70 - 130
Chloroethane	0.32	U	20.0	21.3		ug/L		107	40 - 160

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-164119-1 MS
Matrix: Water
Analysis Batch: 552087

Client Sample ID: CMS-50-090518
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	0.33	U	20.0	21.0		ug/L		105	70 - 130
Chloromethane	0.14	U	20.0	20.8		ug/L		104	40 - 160
cis-1,2-Dichloroethene	0.22	U	20.0	20.1		ug/L		101	70 - 130
cis-1,3-Dichloropropene	0.46	U	20.0	18.8		ug/L		94	70 - 130
Cyclohexane	0.32	U	20.0	21.3		ug/L		106	70 - 130
Dichlorobromomethane	0.34	U	20.0	19.8		ug/L		99	70 - 130
Dichlorodifluoromethane	0.12	U	20.0	20.8		ug/L		104	40 - 160
Ethylbenzene	0.30	U	20.0	18.9		ug/L		94	70 - 130
Isopropylbenzene	0.34	U	20.0	19.3		ug/L		96	70 - 130
Methyl acetate	0.31	U	40.0	40.7		ug/L		102	70 - 130
Methyl tert-butyl ether	0.47	U	20.0	19.6		ug/L		98	70 - 130
Methylcyclohexane	0.26	U	20.0	19.4		ug/L		97	70 - 130
Methylene Chloride	0.32	U	20.0	20.1		ug/L		101	70 - 130
Styrene	0.42	U	20.0	19.7		ug/L		98	70 - 130
Tetrachloroethene	0.25	U	20.0	18.8		ug/L		94	70 - 130
Toluene	0.38	U	20.0	19.6		ug/L		98	70 - 130
trans-1,2-Dichloroethene	0.24	U	20.0	20.9		ug/L		104	70 - 130
trans-1,3-Dichloropropene	0.49	U	20.0	18.2		ug/L		91	70 - 130
Trichloroethene	0.31	U	20.0	20.0		ug/L		100	70 - 130
Trichlorofluoromethane	0.14	U	20.0	20.2		ug/L		101	40 - 160
Vinyl chloride	0.17	U	20.0	21.3		ug/L		106	70 - 130
Xylenes, Total	0.65	U	40.0	36.8		ug/L		92	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*
4-Bromofluorobenzene	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*110*		*70 - 130*
Toluene-d8 (Surr)	*113*		*70 - 130*

Lab Sample ID: 460-164119-1 MSD
Matrix: Water
Analysis Batch: 552087

Client Sample ID: CMS-50-090518
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.24	U	20.0	20.1		ug/L		101	70 - 130	1	20
1,1,2,2-Tetrachloroethane	0.37	U	20.0	20.0		ug/L		100	70 - 130	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	20.0	20.8		ug/L		104	70 - 130	3	20
1,1,2-Trichloroethane	0.43	U	20.0	19.2		ug/L		96	70 - 130	5	20
1,1-Dichloroethane	0.26	U	20.0	21.2		ug/L		106	70 - 130	0	20
1,1-Dichloroethene	0.12	U	20.0	20.2		ug/L		101	70 - 130	2	20
1,2,3-Trichlorobenzene	0.36	U	20.0	20.0		ug/L		100	70 - 130	20	20
1,2,4-Trichlorobenzene	0.37	U	20.0	18.6		ug/L		93	70 - 130	10	20
1,2-Dichlorobenzene	0.43	U	20.0	19.7		ug/L		98	70 - 130	2	20
1,2-Dichloroethane	0.43	U	20.0	19.5		ug/L		98	70 - 130	3	20
1,2-Dichloropropane	0.35	U	20.0	20.6		ug/L		103	70 - 130	1	20
1,3-Dichlorobenzene	0.34	U	20.0	18.7		ug/L		93	70 - 130	0	20
1,4-Dichlorobenzene	0.76	U	20.0	19.4		ug/L		97	70 - 130	1	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 460-164119-1 MSD
Matrix: Water
Analysis Batch: 552087

Client Sample ID: CMS-50-090518
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Butanone (MEK)	1.9	U	100	94.2		ug/L		94	40 - 160	2	20
2-Hexanone	2.9	U	100	93.3		ug/L		93	40 - 160	2	20
4-Methyl-2-pentanone (MIBK)	2.7	U	100	96.0		ug/L		96	40 - 160	0	20
Acetone	5.0	U	100	97.6		ug/L		98	40 - 160	0	20
Benzene	0.43	U	20.0	20.6		ug/L		103	70 - 130	2	20
Bromoform	0.54	U	20.0	18.8		ug/L		94	70 - 130	0	20
Bromomethane	1.0	U	20.0	11.0		ug/L		55	40 - 160	7	20
Carbon disulfide	0.16	U	20.0	21.0		ug/L		105	40 - 160	1	20
Carbon tetrachloride	0.21	U	20.0	20.3		ug/L		101	70 - 130	2	20
Chlorobenzene	0.38	U	20.0	19.1		ug/L		96	70 - 130	0	20
Chlorobromomethane	0.41	U	20.0	20.5		ug/L		103	70 - 130	1	20
Chlorodibromomethane	0.28	U	20.0	18.8		ug/L		94	70 - 130	2	20
Chloroethane	0.32	U	20.0	21.4		ug/L		107	40 - 160	0	20
Chloroform	0.33	U	20.0	20.5		ug/L		102	70 - 130	3	20
Chloromethane	0.14	U	20.0	20.8		ug/L		104	40 - 160	0	20
cis-1,2-Dichloroethene	0.22	U	20.0	19.8		ug/L		99	70 - 130	2	20
cis-1,3-Dichloropropene	0.46	U	20.0	18.8		ug/L		94	70 - 130	0	20
Cyclohexane	0.32	U	20.0	21.5		ug/L		107	70 - 130	1	20
Dichlorobromomethane	0.34	U	20.0	19.5		ug/L		98	70 - 130	1	20
Dichlorodifluoromethane	0.12	U	20.0	20.4		ug/L		102	40 - 160	2	20
Ethylbenzene	0.30	U	20.0	18.6		ug/L		93	70 - 130	1	20
Isopropylbenzene	0.34	U	20.0	19.2		ug/L		96	70 - 130	0	20
Methyl acetate	0.31	U	40.0	39.9		ug/L		100	70 - 130	2	20
Methyl tert-butyl ether	0.47	U	20.0	19.6		ug/L		98	70 - 130	0	20
Methylcyclohexane	0.26	U	20.0	19.5		ug/L		97	70 - 130	0	20
Methylene Chloride	0.32	U	20.0	20.2		ug/L		101	70 - 130	0	20
Styrene	0.42	U	20.0	19.7		ug/L		98	70 - 130	0	20
Tetrachloroethene	0.25	U	20.0	18.4		ug/L		92	70 - 130	2	20
Toluene	0.38	U	20.0	19.4		ug/L		97	70 - 130	1	20
trans-1,2-Dichloroethene	0.24	U	20.0	20.7		ug/L		104	70 - 130	1	20
trans-1,3-Dichloropropene	0.49	U	20.0	18.2		ug/L		91	70 - 130	0	20
Trichloroethene	0.31	U	20.0	19.7		ug/L		98	70 - 130	2	20
Trichlorofluoromethane	0.14	U	20.0	20.3		ug/L		102	40 - 160	0	20
Vinyl chloride	0.17	U	20.0	21.7		ug/L		109	70 - 130	2	20
Xylenes, Total	0.65	U	40.0	37.0		ug/L		93	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*
4-Bromofluorobenzene	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*114*		*70 - 130*
Toluene-d8 (Surr)	*113*		*70 - 130*

Lab Sample ID: MB 460-552301/7
Matrix: Water
Analysis Batch: 552301

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			09/14/18 20:16	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-552301/7
Matrix: Water
Analysis Batch: 552301

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			09/14/18 20:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			09/14/18 20:16	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 20:16	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			09/14/18 20:16	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			09/14/18 20:16	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			09/14/18 20:16	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			09/14/18 20:16	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			09/14/18 20:16	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			09/14/18 20:16	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			09/14/18 20:16	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			09/14/18 20:16	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			09/14/18 20:16	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			09/14/18 20:16	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			09/14/18 20:16	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			09/14/18 20:16	1
Acetone	5.0	U	5.0	5.0	ug/L			09/14/18 20:16	1
Benzene	0.43	U	1.0	0.43	ug/L			09/14/18 20:16	1
Bromoform	0.54	U	1.0	0.54	ug/L			09/14/18 20:16	1
Bromomethane	1.0	U	1.0	1.0	ug/L			09/14/18 20:16	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			09/14/18 20:16	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			09/14/18 20:16	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			09/14/18 20:16	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			09/14/18 20:16	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			09/14/18 20:16	1
Chloroethane	0.32	U	1.0	0.32	ug/L			09/14/18 20:16	1
Chloroform	0.33	U	1.0	0.33	ug/L			09/14/18 20:16	1
Chloromethane	0.14	U	1.0	0.14	ug/L			09/14/18 20:16	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			09/14/18 20:16	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			09/14/18 20:16	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			09/14/18 20:16	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			09/14/18 20:16	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			09/14/18 20:16	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			09/14/18 20:16	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			09/14/18 20:16	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			09/14/18 20:16	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			09/14/18 20:16	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			09/14/18 20:16	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			09/14/18 20:16	1
Styrene	0.42	U	1.0	0.42	ug/L			09/14/18 20:16	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			09/14/18 20:16	1
Toluene	0.38	U	1.0	0.38	ug/L			09/14/18 20:16	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			09/14/18 20:16	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			09/14/18 20:16	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			09/14/18 20:16	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			09/14/18 20:16	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			09/14/18 20:16	1
Xylenes, Total	0.65	U	2.0	0.65	ug/L			09/14/18 20:16	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-552301/7
Matrix: Water
Analysis Batch: 552301

Client Sample ID: Method Blank
Prep Type: Total/NA

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					09/14/18 20:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 130		09/14/18 20:16	1
4-Bromofluorobenzene	95		70 - 130		09/14/18 20:16	1
Dibromofluoromethane (Surr)	114		70 - 130		09/14/18 20:16	1
Toluene-d8 (Surr)	111		70 - 130		09/14/18 20:16	1

Lab Sample ID: LCS 460-552301/3
Matrix: Water
Analysis Batch: 552301

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.5		ug/L		98	70 - 130
1,1,2,2-Tetrachloroethane	20.0	18.8		ug/L		94	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	19.7		ug/L		99	70 - 130
1,1,2-Trichloroethane	20.0	19.8		ug/L		99	70 - 130
1,1-Dichloroethane	20.0	20.3		ug/L		102	70 - 130
1,1-Dichloroethene	20.0	19.1		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	20.0	18.9		ug/L		94	70 - 130
1,2,4-Trichlorobenzene	20.0	18.6		ug/L		93	70 - 130
1,2-Dichlorobenzene	20.0	19.6		ug/L		98	70 - 130
1,2-Dichloroethane	20.0	18.9		ug/L		94	70 - 130
1,2-Dichloropropane	20.0	20.3		ug/L		102	70 - 130
1,3-Dichlorobenzene	20.0	18.4		ug/L		92	70 - 130
1,4-Dichlorobenzene	20.0	18.6		ug/L		93	70 - 130
2-Butanone (MEK)	100	101		ug/L		101	40 - 160
2-Hexanone	100	93.2		ug/L		93	40 - 160
4-Methyl-2-pentanone (MIBK)	100	96.0		ug/L		96	40 - 160
Acetone	100	102		ug/L		102	40 - 160
Benzene	20.0	20.1		ug/L		101	70 - 130
Bromoform	20.0	18.1		ug/L		91	70 - 130
Bromomethane	20.0	10.1		ug/L		50	40 - 160
Carbon disulfide	20.0	20.4		ug/L		102	40 - 160
Carbon tetrachloride	20.0	19.6		ug/L		98	70 - 130
Chlorobenzene	20.0	18.8		ug/L		94	70 - 130
Chlorobromomethane	20.0	20.3		ug/L		102	70 - 130
Chlorodibromomethane	20.0	18.4		ug/L		92	70 - 130
Chloroethane	20.0	20.6		ug/L		103	40 - 160
Chloroform	20.0	20.1		ug/L		101	70 - 130
Chloromethane	20.0	22.3		ug/L		111	40 - 160
cis-1,2-Dichloroethene	20.0	19.7		ug/L		99	70 - 130
cis-1,3-Dichloropropene	20.0	18.7		ug/L		94	70 - 130
Cyclohexane	20.0	20.6		ug/L		103	70 - 130
Dichlorobromomethane	20.0	19.2		ug/L		96	70 - 130
Dichlorodifluoromethane	20.0	21.4		ug/L		107	40 - 160
Ethylbenzene	20.0	18.2		ug/L		91	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-552301/3
Matrix: Water
Analysis Batch: 552301

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	20.0	18.9		ug/L		95	70 - 130
Methyl acetate	40.0	38.0		ug/L		95	70 - 130
Methyl tert-butyl ether	20.0	19.0		ug/L		95	70 - 130
Methylcyclohexane	20.0	19.0		ug/L		95	70 - 130
Methylene Chloride	20.0	20.4		ug/L		102	70 - 130
Styrene	20.0	19.7		ug/L		99	70 - 130
Tetrachloroethene	20.0	18.2		ug/L		91	70 - 130
Toluene	20.0	18.9		ug/L		95	70 - 130
trans-1,2-Dichloroethene	20.0	20.1		ug/L		101	70 - 130
trans-1,3-Dichloropropene	20.0	18.3		ug/L		91	70 - 130
Trichloroethene	20.0	18.8		ug/L		94	70 - 130
Trichlorofluoromethane	20.0	20.3		ug/L		101	40 - 160
Vinyl chloride	20.0	22.4		ug/L		112	70 - 130
Xylenes, Total	40.0	36.0		ug/L		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
4-Bromofluorobenzene	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*112*		*70 - 130*
Toluene-d8 (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 460-552301/4
Matrix: Water
Analysis Batch: 552301

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	20.3		ug/L		101	70 - 130	4	20
1,1,2,2-Tetrachloroethane	20.0	18.6		ug/L		93	70 - 130	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.2		ug/L		101	70 - 130	2	20
1,1,2-Trichloroethane	20.0	20.3		ug/L		102	70 - 130	3	20
1,1-Dichloroethane	20.0	21.4		ug/L		107	70 - 130	5	20
1,1-Dichloroethene	20.0	20.6		ug/L		103	70 - 130	8	20
1,2,3-Trichlorobenzene	20.0	19.7		ug/L		99	70 - 130	4	20
1,2,4-Trichlorobenzene	20.0	18.4		ug/L		92	70 - 130	1	20
1,2-Dichlorobenzene	20.0	19.2		ug/L		96	70 - 130	2	20
1,2-Dichloroethane	20.0	18.7		ug/L		93	70 - 130	1	20
1,2-Dichloropropane	20.0	20.6		ug/L		103	70 - 130	1	20
1,3-Dichlorobenzene	20.0	19.0		ug/L		95	70 - 130	3	20
1,4-Dichlorobenzene	20.0	19.0		ug/L		95	70 - 130	2	20
2-Butanone (MEK)	100	94.7		ug/L		95	40 - 160	7	20
2-Hexanone	100	91.6		ug/L		92	40 - 160	2	20
4-Methyl-2-pentanone (MIBK)	100	92.4		ug/L		92	40 - 160	4	20
Acetone	100	101		ug/L		101	40 - 160	1	20
Benzene	20.0	21.5		ug/L		107	70 - 130	6	20
Bromoform	20.0	18.4		ug/L		92	70 - 130	2	20
Bromomethane	20.0	11.4		ug/L		57	40 - 160	13	20
Carbon disulfide	20.0	21.1		ug/L		106	40 - 160	3	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-552301/4
Matrix: Water
Analysis Batch: 552301

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon tetrachloride	20.0	20.2		ug/L		101	70 - 130	3	20
Chlorobenzene	20.0	19.9		ug/L		100	70 - 130	6	20
Chlorobromomethane	20.0	20.2		ug/L		101	70 - 130	1	20
Chlorodibromomethane	20.0	19.5		ug/L		98	70 - 130	6	20
Chloroethane	20.0	22.9		ug/L		114	40 - 160	11	20
Chloroform	20.0	20.5		ug/L		103	70 - 130	2	20
Chloromethane	20.0	23.5		ug/L		117	40 - 160	5	20
cis-1,2-Dichloroethene	20.0	20.5		ug/L		103	70 - 130	4	20
cis-1,3-Dichloropropene	20.0	19.7		ug/L		99	70 - 130	5	20
Cyclohexane	20.0	20.8		ug/L		104	70 - 130	1	20
Dichlorobromomethane	20.0	20.0		ug/L		100	70 - 130	4	20
Dichlorodifluoromethane	20.0	22.9		ug/L		114	40 - 160	6	20
Ethylbenzene	20.0	20.1		ug/L		100	70 - 130	10	20
Isopropylbenzene	20.0	20.0		ug/L		100	70 - 130	5	20
Methyl acetate	40.0	38.3		ug/L		96	70 - 130	1	20
Methyl tert-butyl ether	20.0	18.9		ug/L		95	70 - 130	0	20
Methylcyclohexane	20.0	19.8		ug/L		99	70 - 130	4	20
Methylene Chloride	20.0	20.5		ug/L		103	70 - 130	1	20
Styrene	20.0	20.2		ug/L		101	70 - 130	2	20
Tetrachloroethene	20.0	19.5		ug/L		98	70 - 130	7	20
Toluene	20.0	19.9		ug/L		99	70 - 130	5	20
trans-1,2-Dichloroethene	20.0	21.1		ug/L		106	70 - 130	5	20
trans-1,3-Dichloropropene	20.0	18.2		ug/L		91	70 - 130	1	20
Trichloroethene	20.0	20.0		ug/L		100	70 - 130	6	20
Trichlorofluoromethane	20.0	21.4		ug/L		107	40 - 160	5	20
Vinyl chloride	20.0	23.4		ug/L		117	70 - 130	5	20
Xylenes, Total	40.0	39.0		ug/L		98	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
4-Bromofluorobenzene	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*110*		*70 - 130*
Toluene-d8 (Surr)	*113*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-551357/8
Matrix: Water
Analysis Batch: 551357

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0040	U	0.020	0.0040	ug/L			09/11/18 22:32	1
Ethylene Dibromide	0.0010	U	0.020	0.0010	ug/L			09/11/18 22:32	1
1,2,3-Trichloropropane	0.0030	U	0.030	0.0030	ug/L			09/11/18 22:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*09/11/18 22:32*	*1*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-551357/5
Matrix: Water
Analysis Batch: 551357

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.0500	0.0467		ug/L		93	40 - 160
Ethylene Dibromide	0.0500	0.0518		ug/L		104	70 - 130
1,2,3-Trichloropropane	0.0500	0.0532		ug/L		106	40 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*70 - 130*

Lab Sample ID: 460-164119-1 MS
Matrix: Water
Analysis Batch: 551357

Client Sample ID: CMS-50-090518
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.0040	U	0.0500	0.0455		ug/L		91	40 - 160
Ethylene Dibromide	0.0010	U	0.0500	0.0545		ug/L		109	70 - 130
1,2,3-Trichloropropane	0.0030	U	0.0500	0.0581		ug/L		116	40 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*70 - 130*

Lab Sample ID: 460-164119-1 MSD
Matrix: Water
Analysis Batch: 551357

Client Sample ID: CMS-50-090518
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.0040	U	0.0500	0.0456		ug/L		91	40 - 160	0	20
Ethylene Dibromide	0.0010	U	0.0500	0.0553		ug/L		111	70 - 130	1	20
1,2,3-Trichloropropane	0.0030	U	0.0500	0.0576		ug/L		115	40 - 160	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*70 - 130*

GC/MS VOA

Analysis Batch: 551357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-164119-1	CMS-50-090518	Total/NA	Water	8260C SIM	
460-164119-2	RW-6-090518	Total/NA	Water	8260C SIM	
460-164119-3	CMS-100-090518	Total/NA	Water	8260C SIM	
460-164119-4	CMS-160-090518	Total/NA	Water	8260C SIM	
460-164119-5	OB-20B-090518	Total/NA	Water	8260C SIM	
460-164119-6	RW-6A-090518	Total/NA	Water	8260C SIM	
460-164119-7	CMS-27S-090518	Total/NA	Water	8260C SIM	
460-164119-8	SC-01-090518	Total/NA	Water	8260C SIM	
460-164119-9	TB-01-09052018	Total/NA	Water	8260C SIM	
MB 460-551357/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-551357/5	Lab Control Sample	Total/NA	Water	8260C SIM	
460-164119-1 MS	CMS-50-090518	Total/NA	Water	8260C SIM	
460-164119-1 MSD	CMS-50-090518	Total/NA	Water	8260C SIM	

Analysis Batch: 552087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-164119-1	CMS-50-090518	Total/NA	Water	8260C	
460-164119-2	RW-6-090518	Total/NA	Water	8260C	
460-164119-3	CMS-100-090518	Total/NA	Water	8260C	
460-164119-4	CMS-160-090518	Total/NA	Water	8260C	
MB 460-552087/7	Method Blank	Total/NA	Water	8260C	
LCS 460-552087/3	Lab Control Sample	Total/NA	Water	8260C	
460-164119-1 MS	CMS-50-090518	Total/NA	Water	8260C	
460-164119-1 MSD	CMS-50-090518	Total/NA	Water	8260C	

Analysis Batch: 552301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-164119-5	OB-20B-090518	Total/NA	Water	8260C	
460-164119-6	RW-6A-090518	Total/NA	Water	8260C	
460-164119-7	CMS-27S-090518	Total/NA	Water	8260C	
460-164119-8	SC-01-090518	Total/NA	Water	8260C	
460-164119-9	TB-01-09052018	Total/NA	Water	8260C	
MB 460-552301/7	Method Blank	Total/NA	Water	8260C	
LCS 460-552301/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-552301/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Client Sample ID: CMS-50-090518
Lab Sample ID: 460-164119-1
Date Collected: 09/05/18 10:10
Matrix: Water
Date Received: 09/06/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	552087	09/14/18 15:06	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	551357	09/12/18 02:47	XXC	TAL EDI

Client Sample ID: RW-6-090518
Lab Sample ID: 460-164119-2
Date Collected: 09/05/18 10:15
Matrix: Water
Date Received: 09/06/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	552087	09/14/18 15:33	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	551357	09/12/18 03:10	XXC	TAL EDI

Client Sample ID: CMS-100-090518
Lab Sample ID: 460-164119-3
Date Collected: 09/05/18 11:05
Matrix: Water
Date Received: 09/06/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	552087	09/14/18 16:00	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	551357	09/12/18 03:33	XXC	TAL EDI

Client Sample ID: CMS-160-090518
Lab Sample ID: 460-164119-4
Date Collected: 09/05/18 12:05
Matrix: Water
Date Received: 09/06/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	552087	09/14/18 16:27	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	551357	09/12/18 03:56	XXC	TAL EDI

Client Sample ID: OB-20B-090518
Lab Sample ID: 460-164119-5
Date Collected: 09/05/18 11:30
Matrix: Water
Date Received: 09/06/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	552301	09/14/18 21:10	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	551357	09/12/18 04:19	XXC	TAL EDI

Client Sample ID: RW-6A-090518
Lab Sample ID: 460-164119-6
Date Collected: 09/05/18 13:15
Matrix: Water
Date Received: 09/06/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	552301	09/14/18 21:37	AAT	TAL EDI

Lab Chronicle

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-164119-1

Client Sample ID: RW-6A-090518

Lab Sample ID: 460-164119-6

Date Collected: 09/05/18 13:15
Matrix: Water
Date Received: 09/06/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C SIM		1	551357	09/12/18 04:43	XXC	TAL EDI

Client Sample ID: CMS-27S-090518

Lab Sample ID: 460-164119-7

Date Collected: 09/05/18 13:00
Matrix: Water
Date Received: 09/06/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	552301	09/14/18 22:04	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	551357	09/12/18 05:06	XXC	TAL EDI

Client Sample ID: SC-01-090518

Lab Sample ID: 460-164119-8

Date Collected: 09/05/18 14:40
Matrix: Water
Date Received: 09/06/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	552301	09/14/18 22:31	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	551357	09/12/18 05:29	XXC	TAL EDI

Client Sample ID: TB-01-09052018

Lab Sample ID: 460-164119-9

Date Collected: 09/05/18 00:00
Matrix: Water
Date Received: 09/06/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	552301	09/14/18 20:43	AAT	TAL EDI
Total/NA	Analysis	8260C SIM		1	551357	09/12/18 02:24	XXC	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-164119-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	12028	06-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C SIM		Water	1,2,3-Trichloropropane
8260C SIM		Water	1,2-Dibromo-3-Chloropropane
8260C SIM		Water	Ethylene Dibromide

Method Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-164119-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Cornerstone Environmental Group, LLC
Project/Site: FORD Ringwood Mines E203361

TestAmerica Job ID: 460-164119-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-164119-1	CMS-50-090518	Water	09/05/18 10:10	09/06/18 15:10
460-164119-2	RW-6-090518	Water	09/05/18 10:15	09/06/18 15:10
460-164119-3	CMS-100-090518	Water	09/05/18 11:05	09/06/18 15:10
460-164119-4	CMS-160-090518	Water	09/05/18 12:05	09/06/18 15:10
460-164119-5	OB-20B-090518	Water	09/05/18 11:30	09/06/18 15:10
460-164119-6	RW-6A-090518	Water	09/05/18 13:15	09/06/18 15:10
460-164119-7	CMS-27S-090518	Water	09/05/18 13:00	09/06/18 15:10
460-164119-8	SC-01-090518	Water	09/05/18 14:40	09/06/18 15:10
460-164119-9	TB-01-09052018	Water	09/05/18 00:00	09/06/18 15:10

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Tim Roeper	Samplers Name (Printed): Emily Barry / Chris Rinaldi	Site/Project Identification: Ringwood	
Company: Cornerstone Environmental	P. O. #: 180361-006	State (Location of site): NJ: X NY:	Other:
		Regulatory Program:	DKQP:
Address: 100 Crystal Run Rd, Suite 101	Analysis Turnaround Time: Standard X		
City: Middletown State: NY 10941	Rush Charges Authorized For: 2 Week / 1 Week / Other		
Phone: 845-695-0200 Fax:			

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs + TICs w/ SIM	Sample Numbers
CMS-50-090518	9/5/18	1010	GW	4	X	1
CMS-50-090518-MS	9/5/18	1010	GW	4	X	1
CMS-50-090518-MSD	9/5/18	1010	GW	4	X	1
RW-6-090518	9/5/18	1015	GW	4	X	2
CMS-100-090518	9/5/18	1105	GW	4	X	3
CMS-160-090518	9/5/18	1205	GW	4	X	4
OB-20B-090518	9/5/18	1130	GW	4	X	5
RW-6A-090518	9/5/18	1315	GW	4	X	6
CMS-275-090518	9/5/18	1300	GW	4	X	7
SC-01-090518	9/5/18	1440	GW	4	X	8

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 164119

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____

Soil:
Water: 2

Special Instructions

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1) Daniel Wheeler	Cornerstone	9/6/18 11:00	1) TIM YAP	TA EDISON
2) TIM YAP	TA EDISON	9/6/18 1510	2) Kelly Jan	TAEdi
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

IR # 9 0.7 °C NOCS

460-164119 Chain of Custody

9/17/2018

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice) Tim Roeper	Samplers Name (Printed) Emily Barry / Chris Rinaldi	Site/Project Identification Ringwood
Company Cornerstone Environmental	P. O. # 180361-006	State (Location of site): NJ: ☒ NY: ☐ Other:
		Regulatory Program: DKQP: ☐
Address 100 Crystal Run Rd, Suite 101	Analysis Turnaround Time: Standard ☒	
City Middletown State NY 10941	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone 845-695-0200 Fax		

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL VOCs +15 TICs w/SIM	LAB USE ONLY Project No: / Job No: 164119 / Sample Numbers
TB-01-090518	09/05/18	-	BW	3	X	9

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____ — Soil: / Water: 2

Special Instructions Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
Daniel Wheeler	Cornerstone	9/6/18 11:00	1) Tim Yap	TA Edison
2) Tim Yap	TA Edison	9/6/18 1510	2) Kelly Jan	TAEdi
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

IR # 9

07 °C NoCS

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 164119

Number of Coolers: 1 IR Gun #: 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	0.7 °C	0.7 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: TY Date: 9/6/18

Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 460-164119-1

Login Number: 164119
List Number: 1
Creator: Villanueva, Angelica P

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT D

DATA VALIDATION REPORTS (ON COMPACT DISC)

August 31, 2018

Tim Roeper
Cornerstone EG
100 Crystal Run Road
Suite 101
Middletown, NY 10941

CADENA project ID: E203361
Project: Ford Ringwood Mines Project
Project number:
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: TestAmerica - Edison
Laboratory submittal: 163149-1
Sample date: 2018-08-21 2018-08-22
Report received by CADENA: 2018-08-31
Initial Data Verification completed by CADENA: 2018-08-31

The following minor QC exceptions or missing information were noted:

MBK - METHOD BLANKS had detections BELOW the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 5X the method blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags :
TOTAL METALS QC batch 548003 - ANTIMONY - UB flags - samples -001 through -013, -016, -017, -018.

FBK - FIELD BLANKS had detections BELOW the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 5X the FIELD blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags :
DISSOLVED METALS - SODIUM - B flags - samples -002, -003, -006, -007, -008, -009, -010, -011, -012, -013, -017, -018.
DISSOLVED ALUMINUM - Qualifications not required.

FBK - FIELD BLANKS had detections ABOVE the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 10X the FIELD blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags :
GCMS VOC - METHYLENE CHLORIDE - UB flags - samples -017, -018.

LCS - LCS recoveries were outliers biased LOW for these analytes (or one LCS and the associated LCS/LCSD RPD). The listed client sample results should be considered to be estimated and qualified with J flags if detected or UJ flags if non-detect: .
GCMS SVOC QC batch 547376 - 2-METHYLPHENOL, CAPROLACTAM - UJ flags - samples -013, -014, -016, -017, -018.
GCMS SVOC QC batch 547339 - 2-METHYLPHENOL - UJ flags - samples -001 through -012.

TIC - Tentatively Identified Compounds (TIC's) detections reported for samples noted should all be considered to be estimated and qualified with NJ flags.
GCMS VOC and GCMS SVOC.

MS/MSD recovery outliers or sample duplicate RPD outliers were not determined using a client sample from this submittal for the test and QC batch noted so qualification was not required based on these sample-specific QC outliers:
GCMS SVOC QC batch 547376

GCMS VOC-SIM, GCMS SVOC-SIM analytical batch CCV STANDARD response outliers as noted in the laboratory submittal case narrative were not used to qualify client sample results as part of this level 2 data package verification review.

LCS or LCSD recoveries but not both or LCS/LCSD RPD only were outliers so client sample results were not qualified based on these QC outliers alone:
GCMS VOC QC batch 547593 - METHYL ACETATE
GCMS SVOC-SIM QC batch 547339 - DIBENZO(AH)ANTHRACENE, PENTACHLOROPHENOL

LCS recoveries were outliers biased HIGH for these tests and analytes (or one LCS and the associated LCS/LCSD RPD). All associated client sample results were non-detect for these analytes so were not affected by the high bias and qualification was not required:
GCMS VOC QC batch 547498 - METHYL ACETATE.
GCMS SVOC-SIM QC batch 547376 - HEXACHLOROBENZENE.

SURROGATE recoveries were outside of laboratory control limits biased low but greater than 10% for only 1 of 3 acid fraction specific surrogate so qualification of client sample results noted below were not required based on this QC outlier alone:
GCMS SVOC - samples -001, -005, -006, -007, -008, -009, -010, -011.
SURROGATE recoveries were biased high for only 1 of 3 acid fraction surrogates so qualification was not required for the following:
GCMS SVOC - samples -013, -014, -017, QC batch 547376 LCS and METHOD BLANK.

MS or MSD recoveries but not both or RPD only were outliers for the following analytes so results for the client sample spiked were not qualified based on these QC outliers alone:
GCMS VOC sample -002 - METHYL ACETATE.
GCMS SVOC sample -002 - CAPROLACTAM (note 2-METHYLPHENOL MS/MSD recoveries were both biased low but this result is already qualified based on low LCS recoveries noted above).
CHLORIDE sample -006.

MS/MSD spike concentrations were less than 4X the original sample concentration for the following analytes in the client sample noted so MS/MSD percent recoveries are not considered to be statistically reliable and were not used to qualify client sample results:
DISSOLVED METALS sample -002 - CALCIUM, MAGNESIUM, MANGANESE, SODIUM.
TOTAL METALS sample -002 - CALCIUM.
CHLORIDE -sample -002.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

16 Water sample(s) and 1 field blank were analyzed for GCMS VOC, GCMS SVOC, GC Other, Metals, General Chemistry and MISC parameter(s). 1 Trip blank was analyzed for GCMS VOC parameters.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, LCS/LCD RPD, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Edison
Laboratory Submittal: 163149-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	METALS BY ICPMS(D)	METALS BY ICPMS	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE CYANIDE (AUTOMATED COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
4601631491	OB-25-082118	8/21/2018	10:35:00	X	X	X	X	X	X	X	X	X	X	X	X
46016314910	OB-22-082118	8/21/2018	1:35:00	X	X	X	X	X	X	X	X	X	X	X	X
46016314911	RW-16-082118	8/21/2018	4:45:00	X	X	X	X	X	X	X	X	X	X	X	X
46016314912	OB-14A-082118	8/21/2018	2:45:00	X	X	X	X	X	X	X	X	X	X	X	X
46016314913	OB-14B-082118	8/21/2018	3:50:00	X	X	X	X	X	X	X	X	X	X	X	X
46016314914	FB-01-082118	8/21/2018	10:40:00	X	X	X	X	X	X	X	X	X	X	X	X
46016314915	TB-01-082218	8/22/2018	12:00:00	X	X										
46016314916	OB-23-082118	8/21/2018	2:55:00	X	X	X	X	X	X	X	X	X	X	X	X
46016314917	OB-3-082218	8/22/2018	10:00:00	X	X	X	X	X	X	X	X	X	X	X	X
46016314918	OB-24-082218	8/22/2018	10:25:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631492	OB-7-082118	8/21/2018	12:50:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631493	OB-6-082118	8/21/2018	3:15:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631494	OB-4-082118	8/21/2018	4:35:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631495	OB-16-082118	8/21/2018	9:35:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631496	OB-18-082118	8/21/2018	10:00:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631497	OB-17-082118	8/21/2018	12:05:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631498	Dup-01-082118	8/21/2018	12:00:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631499	OB-28-082118	8/21/2018	12:35:00	X	X	X	X	X	X	X	X	X	X	X	X

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

	Sample Name:	OB-25-082118				OB-22-082118				RW-16-082118				OB-14A-082118				OB-14B-082118			
	Lab Sample ID:	4601631491				46016314910				46016314911				46016314912				46016314913			
	Sample Date:	8/21/2018				8/21/2018				8/21/2018				8/21/2018				8/21/2018			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC																					
OSW-8260C																					
Indane - TIC	496-11-7																				
Methylene Chloride	75-09-2																				
GC/MS SVOC																					
OSW-8270D																					
2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Caprolactam	105-60-2																	ND	10	ug/l	UJ
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7													12	---	ug/l	NJ				
Unknown - TIC	Tic1																				
Metals																					
OSW-6020B																					
Antimony	7440-36-0	1.4	2.0	ug/l	UB	1.4	2.0	ug/l	UB	0.86	2.0	ug/l	UB	1.2	2.0	ug/l	UB	0.86	2.0	ug/l	UB
Sodium - Dissolved	7440-23-5					18200	200	ug/l	B	15000	200	ug/l	B	14600	200	ug/l	B	17200	200	ug/l	B

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	FB-01-082118				OB-23-082118				OB-3-082218				OB-24-082218				OB-7-082118			
		Lab Sample ID:	46016314914				46016314916				46016314917				46016314918				4601631492			
		Sample Date:	8/21/2018				8/21/2018				8/22/2018				8/22/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																						
	OSW-8260C																					
	Indane - TIC	496-11-7					6.3	---	ug/l	NJ												
	Methylene Chloride	75-09-2									0.32	1.0	ug/l	UB	0.37	1.0	ug/l	UB				
GC/MS SVOC																						
	OSW-8270D																					
	2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	Caprolactam	105-60-2	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ				
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7					23	---	ug/l	NJ												
	Unknown - TIC	Tic1					32	---	ug/l	NJ												
Metals																						
	OSW-6020B																					
	Antimony	7440-36-0					1.2	2.0	ug/l	UB	1.0	2.0	ug/l	UB	0.76	2.0	ug/l	UB	0.98	2.0	ug/l	UB
	Sodium - Dissolved	7440-23-5									3540	200	ug/l	B	14400	200	ug/l	B	8850	200	ug/l	B

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

	Sample Name:	OB-6-082118					OB-4-082118				OB-16-082118				OB-18-082118				OB-17-082118			
	Lab Sample ID:	4601631493					4601631494				4601631495				4601631496				4601631497			
	Sample Date:	8/21/2018					8/21/2018				8/21/2018				8/21/2018				8/21/2018			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC																					
OSW-8260C																					
Indane - TIC	496-11-7																				
Methylene Chloride	75-09-2																				
GC/MS SVOC																					
OSW-8270D																					
2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Caprolactam	105-60-2																				
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7																				
Unknown - TIC	Tic1									9.8	---	ug/l	NJ								
Metals																					
OSW-6020B																					
Antimony	7440-36-0	1.1	2.0	ug/l	UB	1.0	2.0	ug/l	UB	1.0	2.0	ug/l	UB	0.86	2.0	ug/l	UB	1.0	2.0	ug/l	UB
Sodium - Dissolved	7440-23-5	9410	200	ug/l	B									16400	200	ug/l	B	13300	200	ug/l	B

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

			Sample Name:	Dup-01-082118			OB-28-082118			
			Lab Sample ID:	4601631498			4601631499			
			Sample Date:	8/21/2018			8/21/2018			
	Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC										
	OSW-8260C									
	Indane - TIC	496-11-7								
	Methylene Chloride	75-09-2								
GC/MS SVOC										
	OSW-8270D									
	2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	Caprolactam	105-60-2								
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7								
	Unknown - TIC	Tic1	6.6	---	ug/l	NJ				
Metals										
	OSW-6020B									
	Antimony	7440-36-0	0.99	2.0	ug/l	UB	0.68	2.0	ug/l	UB
	Sodium - Dissolved	7440-23-5	4360	200	ug/l	B	20000	200	ug/l	B

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	OB-25-082118				OB-22-082118				RW-16-082118			
		Lab Sample ID:	4601631491				46016314910				46016314911			
		Sample Date:	8/21/2018				8/21/2018				8/21/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	OB-25-082118				OB-22-082118				RW-16-082118			
		Lab Sample ID:	4601631491				46016314910				46016314911			
		Sample Date:	8/21/2018				8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8260CSIM														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
OSW-8270D														
	1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Unknown - TIC	Tic1												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

			Sample Name:	OB-25-082118				OB-22-082118				RW-16-082118			
			Lab Sample ID:	4601631491				46016314910				46016314911			
			Sample Date:	8/21/2018				8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	1960	40.0	ug/l	---	165	40.0	ug/l	---	ND	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	1.4	2.0	ug/l	UB	1.4	2.0	ug/l	UB	0.86	2.0	ug/l	UB
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	1.1	2.0	ug/l	J	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	38.0	4.0	ug/l	---	13.5	4.0	ug/l	---	39.3	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	28.6	4.0	ug/l	---	10.6	4.0	ug/l	---	30.2	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	39100	200	ug/l	---	31500	200	ug/l	---	66700	200	ug/l	---
	Calcium - Dissolved	7440-70-2	37900	200	ug/l	---	27200	200	ug/l	---	55200	200	ug/l	---
	Chromium	7440-47-3	3.0	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	1.4	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	15.2	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	8.3	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	2760	120	ug/l	---	226	120	ug/l	---	117	120	ug/l	J
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	1.8	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	9200	200	ug/l	---	6550	200	ug/l	---	22000	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	7350	200	ug/l	---	4800	200	ug/l	---	16500	200	ug/l	---
	Manganese	7439-96-5	67.5	8.0	ug/l	---	4.7	8.0	ug/l	J	ND	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	2.9	8.0	ug/l	J	ND	8.0	ug/l	---	ND	8.0	ug/l	---
	Nickel	7440-02-0	4.6	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	1.7	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	8010	200	ug/l	---	1050	200	ug/l	---	2110	200	ug/l	---
	Potassium - Dissolved	7440-09-7	7670	200	ug/l	---	863	200	ug/l	---	1700	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	0.92	10.0	ug/l	J	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	0.87	10.0	ug/l	J	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	68000	200	ug/l	---	23700	200	ug/l	---	20300	200	ug/l	---
	Sodium - Dissolved	7440-23-5	59200	200	ug/l	---	18200	200	ug/l	B	15000	200	ug/l	B
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	3.9	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	17.5	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	14.0	16.0	ug/l	J	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

			Sample Name:	OB-25-082118				OB-22-082118				RW-16-082118			
			Lab Sample ID:	4601631491				46016314910				46016314911			
			Sample Date:	8/21/2018				8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	86.5	6.00	mg/l	---	38.5	1.20	mg/l	---	51.4	2.40	mg/l	---
	Sulfate	14808-79-8	10.3	0.60	mg/l	---	16.9	0.60	mg/l	---	12.9	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	138	5.0	mg/l	---	77.9	5.0	mg/l	---	207	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	138	5.0	mg/l	---	77.9	5.0	mg/l	---	207	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	OB-14A-082118				OB-14B-082118				FB-01-082118			
		Lab Sample ID:	46016314912				46016314913				46016314914			
		Sample Date:	8/21/2018				8/21/2018				8/21/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	4.3	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	OB-14A-082118				OB-14B-082118				FB-01-082118			
		Lab Sample ID:	46016314912				46016314913				46016314914			
		Sample Date:	8/21/2018				8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8260CSIM														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
OSW-8270D														
	1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7	12	---	ug/l	NJ								
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Unknown - TIC	Tic1												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

			Sample Name:	OB-14A-082118				OB-14B-082118				FB-01-082118			
			Lab Sample ID:	46016314912				46016314913				46016314914			
			Sample Date:	8/21/2018				8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	0.33	0.20	ug/l	---	ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	56.3	40.0	ug/l	---	42.6	40.0	ug/l	---	18.3	40.0	ug/l	J
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	1.2	2.0	ug/l	UB	0.86	2.0	ug/l	UB	ND	2.0	ug/l	---
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	1.2	2.0	ug/l	J	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	0.80	2.0	ug/l	J	ND	2.0	ug/l	---
	Barium	7440-39-3	418	4.0	ug/l	---	45.6	4.0	ug/l	---	ND	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	285	4.0	ug/l	---	38.4	4.0	ug/l	---	ND	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	105000	200	ug/l	---	104000	200	ug/l	---	ND	200	ug/l	---
	Calcium - Dissolved	7440-70-2	95300	200	ug/l	---	91500	200	ug/l	---	ND	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	48500	120	ug/l	---	944	120	ug/l	---	ND	120	ug/l	---
	Iron - Dissolved	7439-89-6	9430	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	3.1	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	10300	200	ug/l	---	29000	200	ug/l	---	ND	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	8300	200	ug/l	---	22300	200	ug/l	---	ND	200	ug/l	---
	Manganese	7439-96-5	1880	8.0	ug/l	---	1980	8.0	ug/l	---	ND	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	1540	8.0	ug/l	---	1620	8.0	ug/l	---	ND	8.0	ug/l	---
	Nickel	7440-02-0	3.0	4.0	ug/l	J	1.4	4.0	ug/l	J	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	1.8	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	5120	200	ug/l	---	3220	200	ug/l	---	ND	200	ug/l	---
	Potassium - Dissolved	7440-09-7	4560	200	ug/l	---	2780	200	ug/l	---	ND	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	17600	200	ug/l	---	22300	200	ug/l	---	2050	200	ug/l	---
	Sodium - Dissolved	7440-23-5	14600	200	ug/l	B	17200	200	ug/l	B	113	200	ug/l	J
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	1.7	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	21.0	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	10.6	16.0	ug/l	J	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

			Sample Name:	OB-14A-082118			OB-14B-082118				FB-01-082118			
			Lab Sample ID:	46016314912			46016314913				46016314914			
			Sample Date:	8/21/2018			8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	20.0	1.20	mg/l	---	49.1	2.40	mg/l	---	ND	0.12	mg/l	---
	Sulfate	14808-79-8	0.70	0.60	mg/l	---	13.2	0.60	mg/l	---	ND	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	337	5.0	mg/l	---	337	5.0	mg/l	---	ND	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	337	5.0	mg/l	---	337	5.0	mg/l	---	ND	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	TB-01-082218				OB-23-082118				OB-3-082218			
		Lab Sample ID:	46016314915				46016314916				46016314917			
		Sample Date:	8/22/2018				8/21/2018				8/22/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Indane - TIC	496-11-7					6.3	---	ug/l	NJ				
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.32	1.0	ug/l	UB
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	TB-01-082218				OB-23-082118				OB-3-082218			
		Lab Sample ID:	46016314915				46016314916				46016314917			
		Sample Date:	8/22/2018				8/21/2018				8/22/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8260CSIM														
	1,2,3-Trichloropropane	96-18-4					ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
OSW-8270D														
	1,1'-Biphenyl	92-52-4					ND	10	ug/l	---	ND	10	ug/l	---
	1,2,4,5-Tetrachlorobenzene	95-94-3					ND	10	ug/l	---	ND	10	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1					ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2					ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4					ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2					ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2					ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9					ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5					ND	20	ug/l	---	ND	20	ug/l	---
	2,4-Dinitrotoluene	121-14-2					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2,6-Dinitrotoluene	606-20-2					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Chloronaphthalene	91-58-7					ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8					ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6					ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylphenol	95-48-7					ND	10	ug/l	UJ	ND	10	ug/l	UJ
	2-Nitroaniline	88-74-4					ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitrophenol	88-75-5					ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1					ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2					ND	10	ug/l	---	ND	10	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1					ND	20	ug/l	---	ND	20	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3					ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7					ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8					ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3					ND	10	ug/l	---	ND	10	ug/l	---
	4-Methylphenol	106-44-5					ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6					ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitrophenol	100-02-7					ND	20	ug/l	---	ND	20	ug/l	---
	Acenaphthene	83-32-9					ND	10	ug/l	---	ND	10	ug/l	---
	Acenaphthylene	208-96-8					ND	10	ug/l	---	ND	10	ug/l	---
	Acetophenone	98-86-2					ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7					ND	10	ug/l	---	ND	10	ug/l	---
	Atrazine	1912-24-9					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzaldehyde	100-52-7					ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[g,h,i]perylene	191-24-2					ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[k]fluoranthene	207-08-9					ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1					ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Butyl benzyl phthalate	85-68-7					ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2					ND	10	ug/l	UJ	ND	10	ug/l	UJ
	Carbazole	86-74-8					ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7					23	---	ug/l	NJ				
	Di-n-butyl phthalate	84-74-2					ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0					ND	10	ug/l	---	ND	10	ug/l	---
	Dibenzofuran	132-64-9					ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2					ND	10	ug/l	---	ND	10	ug/l	---
	Dimethyl phthalate	131-11-3					ND	10	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0					ND	10	ug/l	---	ND	10	ug/l	---
	Fluorene	86-73-7					ND	10	ug/l	---	ND	10	ug/l	---
	Hexachlorobutadiene	87-68-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4					ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1					ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7					ND	1.0	ug/l	---	ND	1.0	ug/l	---
	N-Nitrosodiphenylamine	86-30-6					1.0	10	ug/l	J	ND	10	ug/l	---
	Naphthalene	91-20-3					ND	10	ug/l	---	ND	10	ug/l	---
	Nitrobenzene	98-95-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Phenanthrene	85-01-8					ND	10	ug/l	---	ND	10	ug/l	---
	Phenol	108-95-2					ND	10	ug/l	---	ND	10	ug/l	---
	Pyrene	129-00-0					ND	10	ug/l	---	ND	10	ug/l	---
	Unknown - TIC	Tic1					32	---	ug/l	NJ				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	TB-01-082218				OB-23-082118				OB-3-082218			
		Lab Sample ID:	46016314915				46016314916				46016314917			
		Sample Date:	8/22/2018				8/21/2018				8/22/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1					ND	0.22	ug/l	---	ND	0.21	ug/l	---
	Benzo[a]anthracene	56-55-3					ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8					ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2					ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4					ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3					ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1					ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5					ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9					ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5					ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3					ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5					33.4	40.0	ug/l	J	ND	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5					ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0					1.2	2.0	ug/l	UB	1.0	2.0	ug/l	UB
	Antimony - Dissolved	7440-36-0					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3					373	4.0	ug/l	---	3.0	4.0	ug/l	J
	Barium - Dissolved	7440-39-3					265	4.0	ug/l	---	2.8	4.0	ug/l	J
	Beryllium	7440-41-7					ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7					ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2					91500	200	ug/l	---	9520	200	ug/l	---
	Calcium - Dissolved	7440-70-2					87300	200	ug/l	---	8650	200	ug/l	---
	Chromium	7440-47-3					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6					44200	120	ug/l	---	1930	120	ug/l	---
	Iron - Dissolved	7439-89-6					10000	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1					1.1	1.2	ug/l	J	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1					ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4					10600	200	ug/l	---	3230	200	ug/l	---
	Magnesium - Dissolved	7439-95-4					8820	200	ug/l	---	2480	200	ug/l	---
	Manganese	7439-96-5					1620	8.0	ug/l	---	9.3	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5					1430	8.0	ug/l	---	15.2	8.0	ug/l	---
	Nickel	7440-02-0					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7					6840	200	ug/l	---	1020	200	ug/l	---
	Potassium - Dissolved	7440-09-7					6440	200	ug/l	---	902	200	ug/l	---
	Selenium	7782-49-2					ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2					ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5					66400	200	ug/l	---	4780	200	ug/l	---
	Sodium - Dissolved	7440-23-5					56800	200	ug/l	---	3540	200	ug/l	B
	Thallium	7440-28-0					ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0					ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2					1.3	4.0	ug/l	J	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6					10.8	16.0	ug/l	J	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6					ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6					ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6					ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

			Sample Name:	TB-01-082218				OB-23-082118				OB-3-082218			
			Lab Sample ID:	46016314915				46016314916				46016314917			
			Sample Date:	8/22/2018				8/21/2018				8/22/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5					0.0063	0.010	mg/l	J	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6					63.2	2.40	mg/l	---	4.40	0.12	mg/l	---
	Sulfate	14808-79-8					2.56	0.60	mg/l	---	8.79	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506					348	5.0	mg/l	---	28.8	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508					348	5.0	mg/l	---	28.8	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	OB-24-082218				OB-7-082118				OB-6-082118			
		Lab Sample ID:	46016314918				4601631492				4601631493			
		Sample Date:	8/22/2018				8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Indane - TIC	496-11-7												
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylene Chloride	75-09-2	0.37	1.0	ug/l	UB	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	OB-24-082218				OB-7-082118				OB-6-082118			
		Lab Sample ID:	46016314918				4601631492				4601631493			
		Sample Date:	8/22/2018				8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8260CSIM														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
OSW-8270D														
	1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	UJ	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Unknown - TIC	Tic1												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

			Sample Name:	OB-24-082218				OB-7-082118				OB-6-082118			
			Lab Sample ID:	46016314918				4601631492				4601631493			
			Sample Date:	8/22/2018				8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.22	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	0.055	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	0.016	0.020	ug/l	J	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.41	ug/l	---	ND	0.40	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	19.7	40.0	ug/l	J	ND	40.0	ug/l	---	38.0	40.0	ug/l	J
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	0.76	2.0	ug/l	UB	0.98	2.0	ug/l	UB	1.1	2.0	ug/l	UB
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	38.7	4.0	ug/l	---	17.2	4.0	ug/l	---	13.7	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	32.3	4.0	ug/l	---	14.9	4.0	ug/l	---	12.5	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	93900	200	ug/l	---	70600	200	ug/l	---	16700	200	ug/l	---
	Calcium - Dissolved	7440-70-2	85100	200	ug/l	---	64800	200	ug/l	---	16000	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	2.8	4.0	ug/l	J	4.3	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	2.1	4.0	ug/l	J	3.3	4.0	ug/l	J
	Copper	7440-50-8	ND	4.0	ug/l	---	3.6	4.0	ug/l	J	11.3	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	2.4	4.0	ug/l	J
	Iron	7439-89-6	46.7	120	ug/l	J	1810	120	ug/l	---	6310	120	ug/l	---
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	24400	200	ug/l	---	29200	200	ug/l	---	4370	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	20100	200	ug/l	---	24000	200	ug/l	---	3630	200	ug/l	---
	Manganese	7439-96-5	273	8.0	ug/l	---	2600	8.0	ug/l	---	388	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	22.0	8.0	ug/l	---	2160	8.0	ug/l	---	326	8.0	ug/l	---
	Nickel	7440-02-0	ND	4.0	ug/l	---	2.1	4.0	ug/l	J	1.4	4.0	ug/l	J
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	1.5	4.0	ug/l	J	ND	4.0	ug/l	---
	Potassium	7440-09-7	2350	200	ug/l	---	2900	200	ug/l	---	1740	200	ug/l	---
	Potassium - Dissolved	7440-09-7	2110	200	ug/l	---	2620	200	ug/l	---	1670	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	18000	200	ug/l	---	10700	200	ug/l	---	10600	200	ug/l	---
	Sodium - Dissolved	7440-23-5	14400	200	ug/l	B	8850	200	ug/l	B	9410	200	ug/l	B
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

			Sample Name:	OB-24-082218				OB-7-082118				OB-6-082118			
			Lab Sample ID:	46016314918				4601631492				4601631493			
			Sample Date:	8/22/2018				8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	73.8	3.00	mg/l	---	21.3	1.20	mg/l	---	5.81	1.20	mg/l	---
	Sulfate	14808-79-8	27.4	0.60	mg/l	---	9.75	0.60	mg/l	---	10.1	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	220	5.0	mg/l	---	284	5.0	mg/l	---	61.3	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	220	5.0	mg/l	---	284	5.0	mg/l	---	61.3	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	OB-4-082118				OB-16-082118				OB-18-082118			
		Lab Sample ID:	4601631494				4601631495				4601631496			
		Sample Date:	8/21/2018				8/21/2018				8/21/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	5.1	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	OB-4-082118				OB-16-082118				OB-18-082118			
		Lab Sample ID:	4601631494				4601631495				4601631496			
		Sample Date:	8/21/2018				8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8260CSIM														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
OSW-8270D														
	1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Unknown - TIC	Tic1					9.8	---	ug/l	NJ				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

			Sample Name:	OB-4-082118			OB-16-082118				OB-18-082118			
			Lab Sample ID:	4601631494			4601631495				4601631496			
			Sample Date:	8/21/2018			8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	0.082	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	0.026	0.050	ug/l	J
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	0.17	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	0.25	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	0.030	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	0.18	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	15.2	40.0	ug/l	J	15.1	40.0	ug/l	J	117	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	1.0	2.0	ug/l	UB	1.0	2.0	ug/l	UB	0.86	2.0	ug/l	UB
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	8.9	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	2.1	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	56.7	4.0	ug/l	---	104	4.0	ug/l	---	7.7	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	50.5	4.0	ug/l	---	75.1	4.0	ug/l	---	7.3	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	48100	200	ug/l	---	133000	200	ug/l	---	37700	200	ug/l	---
	Calcium - Dissolved	7440-70-2	46100	200	ug/l	---	121000	200	ug/l	---	34200	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	1.3	4.0	ug/l	J
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	1.8	4.0	ug/l	J	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	1.4	4.0	ug/l	J	ND	4.0	ug/l	---
	Copper	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	8160	120	ug/l	---	15900	120	ug/l	---	169	120	ug/l	---
	Iron - Dissolved	7439-89-6	1040	120	ug/l	---	1980	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	16000	200	ug/l	---	19100	200	ug/l	---	8870	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	13300	200	ug/l	---	15000	200	ug/l	---	6840	200	ug/l	---
	Manganese	7439-96-5	1420	8.0	ug/l	---	3390	8.0	ug/l	---	4.9	8.0	ug/l	J
	Manganese - Dissolved	7439-96-5	1250	8.0	ug/l	---	2980	8.0	ug/l	---	ND	8.0	ug/l	---
	Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	2540	200	ug/l	---	10400	200	ug/l	---	432	200	ug/l	---
	Potassium - Dissolved	7440-09-7	2480	200	ug/l	---	9400	200	ug/l	---	388	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	101000	200	ug/l	---	41500	200	ug/l	---	6020	200	ug/l	---
	Sodium - Dissolved	7440-23-5	88200	200	ug/l	---	35400	200	ug/l	---	16400	200	ug/l	B
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	5.6	16.0	ug/l	J
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

			Sample Name:	OB-4-082118			OB-16-082118				OB-18-082118			
			Lab Sample ID:	4601631494			4601631495				4601631496			
			Sample Date:	8/21/2018			8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	170	12.0	mg/l	---	72.6	2.40	mg/l	---	1.58	0.12	mg/l	---
	Sulfate	14808-79-8	8.48	0.60	mg/l	---	9.38	0.60	mg/l	---	9.85	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	140	5.0	mg/l	---	388	5.0	mg/l	---	153	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	140	5.0	mg/l	---	388	5.0	mg/l	---	153	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	OB-17-082118				Dup-01-082118				OB-28-082118			
		Lab Sample ID:	4601631497				4601631498				4601631499			
		Sample Date:	8/21/2018				8/21/2018				8/21/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	0.79	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

		Sample Name:	OB-17-082118				Dup-01-082118				OB-28-082118			
		Lab Sample ID:	4601631497				4601631498				4601631499			
		Sample Date:	8/21/2018				8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8260CSIM														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
OSW-8270D														
	1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Unknown - TIC	Tic1					6.6	---	ug/l	NJ				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

			Sample Name:	OB-17-082118				Dup-01-082118				OB-28-082118			
			Lab Sample ID:	4601631497				4601631498				4601631499			
			Sample Date:	8/21/2018				8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	11	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.22	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	ND	40.0	ug/l	---	74.8	40.0	ug/l	---	1190	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	1.0	2.0	ug/l	UB	0.99	2.0	ug/l	UB	0.68	2.0	ug/l	UB
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	0.99	2.0	ug/l	J
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	10.3	4.0	ug/l	---	7.1	4.0	ug/l	---	71.3	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	11.3	4.0	ug/l	---	5.6	4.0	ug/l	---	65.7	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	92400	200	ug/l	---	36900	200	ug/l	---	124000	200	ug/l	---
	Calcium - Dissolved	7440-70-2	86600	200	ug/l	---	31600	200	ug/l	---	126000	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	1.5	4.0	ug/l	J	2.1	4.0	ug/l	J
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	2.0	4.0	ug/l	J
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	6.7	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	1750	120	ug/l	---	108	120	ug/l	J	3260	120	ug/l	---
	Iron - Dissolved	7439-89-6	154	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	1.0	1.2	ug/l	J
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	30700	200	ug/l	---	8820	200	ug/l	---	28200	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	25500	200	ug/l	---	6240	200	ug/l	---	25200	200	ug/l	---
	Manganese	7439-96-5	308	8.0	ug/l	---	3.0	8.0	ug/l	J	3270	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	300	8.0	ug/l	---	ND	8.0	ug/l	---	2930	8.0	ug/l	---
	Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	3.1	4.0	ug/l	J
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	821	200	ug/l	---	423	200	ug/l	---	3870	200	ug/l	---
	Potassium - Dissolved	7440-09-7	854	200	ug/l	---	344	200	ug/l	---	3660	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	15500	200	ug/l	---	6010	200	ug/l	---	22400	200	ug/l	---
	Sodium - Dissolved	7440-23-5	13300	200	ug/l	B	4360	200	ug/l	B	20000	200	ug/l	B
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	3.0	4.0	ug/l	J
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	7.6	16.0	ug/l	J
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163149-1

			Sample Name:	OB-17-082118				Dup-01-082118				OB-28-082118			
			Lab Sample ID:	4601631497				4601631498				4601631499			
			Sample Date:	8/21/2018				8/21/2018				8/21/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	12.9	0.60	mg/l	---	1.79	0.12	mg/l	---	108	6.00	mg/l	---
	Sulfate	14808-79-8	36.4	3.00	mg/l	---	9.84	0.60	mg/l	---	26.2	3.00	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	325	5.0	mg/l	---	125	5.0	mg/l	---	326	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	325	5.0	mg/l	---	125	5.0	mg/l	---	326	5.0	mg/l	---

August 31, 2018

Tim Roeper
Cornerstone EG
100 Crystal Run Road
Suite 101
Middletown, NY 10941

CADENA project ID: E203361
Project: Ford Ringwood Mines Project
Project number:
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: TestAmerica - Edison
Laboratory submittal: 163188-1
Sample date: 2018-08-22
Report received by CADENA: 2018-08-31
Initial Data Verification completed by CADENA: 2018-08-31

The following minor QC exceptions or missing information were noted:

TBK - TRIP BLANKS had detections BELOW the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 5X the TRIP blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags :
GCMS VOC - CARBON DISULFIDE - UB flags - samples -002, -003, -004, -005, -009, -012, -018.

FBK - FIELD BLANKS had detections ABOVE the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 10X the FIELD blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags :
GCMS VOC - METHYLENE CHLORIDE - B flags - samples -005, -013.

LCS - LCS recoveries were outliers biased LOW for these analytes (or one LCS and the associated LCS/LCSD RPD). The listed client sample results should be considered to be estimated and qualified with J flags if detected or UJ flags if non-detect: .
GCMS SVOC QC batch 547375 - 2-METHYLPHENOL, CAPROLACTAM - UJ flags - samples -002, -003, -004, -005, -006, -007, -011, -012, -015, -016, -018.

TIC - Tentatively Identified Compounds (TIC's) detections reported for samples noted should all be considered to be estimated and qualified with NJ flags.
GCMS VOC and GCMS SVOC.

MS/MSD recovery outliers or sample duplicate RPD outliers were not determined using a client sample from this submittal for the test and QC batch noted so qualification was not required based on these sample-specific QC outliers:
GCMS VOC QC batches 547649, 548123
GCMS SVOC QC batch 5481149.

GCMS VOC-SIM, GCMS SVOC, GCMS SVOC-SIM analytical batch CCV STANDARD response outliers as noted in the laboratory submittal case narrative were not used to qualify client sample results as part of this level 2 data package verification review.

LCS or LCSD recoveries but not both or LCS/LCSD RPD only were outliers so client sample results were not qualified based on these QC outliers alone:
GCMS SVOC QC batch 547375 - BENZALDEHYDE
Note: ATRAZINE LCS recovery was biased high and RPD was an outlier but all associated results were non-detect so were not affected by the high bias.

LCS recoveries were outliers biased HIGH for these tests and analytes (or one LCS and the associated LCS/LCSD RPD). All associated client sample results were non-detect for these analytes so were not affected by the high bias and qualification was not required:
GCMS SVOC-SIM QC batch 548149 - DIBENZO(AH)ANTHRACENE.

SURROGATE recoveries were outside of laboratory control limits biased low but greater than 10% for only 1 of 3 acid fraction specific surrogate so qualification of client sample results noted below were not required based on this QC outlier alone:
GCMS SVOC - sample -014 and QC batch 548149 LCS.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

16 Water sample(s) and 1 Field Blank were analyzed for GCMS VOC, GCMS SVOC, GC Other, Metals, General Chemistry and MISC parameter(s). 1 Trip blank was analyzed for GCMS VOC parameters.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, LCS/LCD RPD, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Edison
Laboratory Submittal: 163188-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	METALS BY ICPMS(D)	METALS BY ICPMS	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE CYANIDE (AUTOMATED COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
46016318810	OB-11R-082218	8/22/2018	2:10:00	X	X	X	X	X	X	X	X	X	X	X	X
46016318811	RW-5A-082218	8/22/2018	12:30:00	X	X	X	X	X	X	X	X	X	X	X	X
46016318812	OB-21-082218	8/22/2018	10:30:00	X	X	X	X	X	X	X	X	X	X	X	X
46016318813	OB-27-082218	8/22/2018	2:35:00	X	X	X	X	X	X	X	X	X	X	X	X
46016318814	OB-30B-082218	8/22/2018	3:55:00	X	X	X	X	X	X	X	X	X	X	X	X
46016318815	OB-31-082218	8/22/2018	12:20:00	X	X	X	X	X	X	X	X	X	X	X	X
46016318816	RW-7-082218	8/22/2018	10:25:00	X	X	X	X	X	X	X	X	X	X	X	X
46016318817	TB-02-082318	8/23/2018	12:00:00	X	X										
46016318818	FB-03-082318	8/23/2018	8:00:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631882	OB-13-082218	8/22/2018	12:00:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631883	OB-10-082218	8/22/2018	2:30:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631884	OB-29-082218	8/22/2018	4:05:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631885	OB-15B-082218	8/22/2018	12:15:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631886	OB-33-082218	8/22/2018	2:25:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631887	OB-32-082218	8/22/2018	4:15:00	X	X	X	X	X	X	X	X	X	X	X	X
4601631889	OB-19-082218	8/22/2018	3:50:00	X	X	X	X	X	X	X	X	X	X	X	X

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

	Sample Name:	OB-11R-082218				RW-5A-082218				OB-21-082218				OB-27-082218				OB-31-082218			
	Lab Sample ID:	46016318810				46016318811				46016318812				46016318813				46016318815			
	Sample Date:	8/22/2018				8/22/2018				8/22/2018				8/22/2018				8/22/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																					
OSW-8260C																					
1-Phenyl-1-butene - TIC	824-90-8	11	---	ug/l	NJ																
1H-Indene, 2,3-dihydro-1,3-dimethyl- - TIC	4175-53-5																	9.6	---	ug/l	NJ
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2	19	---	ug/l	NJ									28	---	ug/l	NJ				
1H-Indene, 2,3-dihydro-5-methyl- - TIC	874-35-1													46	---	ug/l	NJ				
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7													21	---	ug/l	NJ				
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2	14	---	ug/l	NJ																
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9	6.0	---	ug/l	NJ																
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4													15	---	ug/l	NJ				
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6	23	---	ug/l	NJ																
Carbon disulfide	75-15-0									0.27	1.0	ug/l	UB								
Cyclopentane, methyl- - TIC	96-37-7	17	---	ug/l	NJ																
Indane - TIC	496-11-7	12	---	ug/l	NJ									24	---	ug/l	NJ				
Methylene Chloride	75-09-2													1.1	1.0	ug/l	B				
Naphthalene - TIC	91-20-3													10	---	ug/l	NJ				
Unknown - TIC	Tic1	5.8	---	ug/l	NJ									13	---	ug/l	NJ	6.1	---	ug/l	NJ
Unknown - TIC	Tic2	7.9	---	ug/l	NJ									9.3	---	ug/l	NJ	8.7	---	ug/l	NJ
Unknown - TIC	Tic3	6.2	---	ug/l	NJ									16	---	ug/l	NJ	7.8	---	ug/l	NJ
Unknown - TIC	Tic4	5.6	---	ug/l	NJ									9.0	---	ug/l	NJ	5.2	---	ug/l	NJ
Unknown - TIC	Tic5	6.3	---	ug/l	NJ									8.9	---	ug/l	NJ				
Unknown - TIC	Tic6	7.7	---	ug/l	NJ									12	---	ug/l	NJ				
Unknown - TIC	Tic7													13	---	ug/l	NJ				
Unknown - TIC	Tic8													9.1	---	ug/l	NJ				
Unknown - TIC	Tic9													9.6	---	ug/l	NJ				
GC/MS SVOC																					
OSW-8270D																					
2-Methylphenol	95-48-7					ND	10	ug/l	UJ	ND	10	ug/l	UJ					ND	10	ug/l	UJ
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6													9.0	---	ug/l	NJ				
Caprolactam	105-60-2					ND	10	ug/l	UJ	ND	10	ug/l	UJ					ND	10	ug/l	UJ
Hexadecanoic acid, butyl ester - TIC	111-06-8																				
Naphthalene, 2,3-dimethyl- - TIC	581-40-8													7.8	---	ug/l	NJ				
Unknown - TIC	Tic1	11	---	ug/l	NJ	150	---	ug/l	NJ	140	---	ug/l	NJ	7.3	---	ug/l	NJ				
Unknown - TIC	Tic2					120	---	ug/l	NJ	110	---	ug/l	NJ								
Unknown - TIC	Tic3					16	---	ug/l	NJ	14	---	ug/l	NJ								

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	RW-7-082218				FB-03-082318				OB-13-082218				OB-10-082218				OB-29-082218			
		Lab Sample ID:	46016318816				46016318818				4601631882				4601631883				4601631884			
		Sample Date:	8/22/2018				8/23/2018				8/22/2018				8/22/2018				8/22/2018			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																						
OSW-8260C																						
1-Phenyl-1-butene - TIC	824-90-8																					
1H-Indene, 2,3-dihydro-1,3-dimethyl- - TIC	4175-53-5																					
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2																					
1H-Indene, 2,3-dihydro-5-methyl- - TIC	874-35-1																					
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7																					
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2																					
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9																					
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4																					
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6																					
Carbon disulfide	75-15-0						0.51	1.0	ug/l	UB	0.47	1.0	ug/l	UB	0.40	1.0	ug/l	UB	0.28	1.0	ug/l	UB
Cyclopentane, methyl- - TIC	96-37-7																					
Indane - TIC	496-11-7																					
Methylene Chloride	75-09-2																					
Naphthalene - TIC	91-20-3																					
Unknown - TIC	Tic1																					
Unknown - TIC	Tic2																					
Unknown - TIC	Tic3																					
Unknown - TIC	Tic4																					
Unknown - TIC	Tic5																					
Unknown - TIC	Tic6																					
Unknown - TIC	Tic7																					
Unknown - TIC	Tic8																					
Unknown - TIC	Tic9																					
GC/MS SVOC																						
OSW-8270D																						
2-Methylphenol	95-48-7		ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6																					
Caprolactam	105-60-2		ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Hexadecanoic acid, butyl ester - TIC	111-06-8																					
Naphthalene, 2,3-dimethyl- - TIC	581-40-8																					
Unknown - TIC	Tic1																		11	---	ug/l	NJ
Unknown - TIC	Tic2																					
Unknown - TIC	Tic3																					

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-15B-082218				OB-33-082218				OB-32-082218				OB-19-082218			
		Lab Sample ID:	4601631885				4601631886				4601631887				4601631889			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018				8/22/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																		
	OSW-8260C																	
	1-Phenyl-1-butene - TIC	824-90-8																
	1H-Indene, 2,3-dihydro-1,3-dimethyl- - TIC	4175-53-5																
	1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2																
	1H-Indene, 2,3-dihydro-5-methyl- - TIC	874-35-1																
	Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7																
	Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2																
	Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9																
	Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4																
	Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6																
	Carbon disulfide	75-15-0	0.26	1.0	ug/l	UB									0.23	1.0	ug/l	UB
	Cyclopentane, methyl- - TIC	96-37-7																
	Indane - TIC	496-11-7																
	Methylene Chloride	75-09-2	0.34	1.0	ug/l	UB												
	Naphthalene - TIC	91-20-3																
	Unknown - TIC	Tic1																
	Unknown - TIC	Tic2																
	Unknown - TIC	Tic3																
	Unknown - TIC	Tic4																
	Unknown - TIC	Tic5																
	Unknown - TIC	Tic6																
	Unknown - TIC	Tic7																
	Unknown - TIC	Tic8																
	Unknown - TIC	Tic9																
GC/MS SVOC																		
	OSW-8270D																	
	2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ				
	Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6																
	Caprolactam	105-60-2	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ				
	Hexadecanoic acid, butyl ester - TIC	111-06-8													8.8	---	ug/l	NJ
	Naphthalene, 2,3-dimethyl- - TIC	581-40-8																
	Unknown - TIC	Tic1																
	Unknown - TIC	Tic2																
	Unknown - TIC	Tic3																

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-11R-082218				RW-5A-082218				OB-21-082218			
		Lab Sample ID:	46016318810				46016318811				46016318812			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
				Report		Valid		Report		Valid		Report		Valid
Analyte	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Phenyl-1-butene - TIC	824-90-8	11	---	ug/l	NJ								
1H-Indene, 2,3-dihydro-1,3-dimethyl- - TIC	4175-53-5												
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2	19	---	ug/l	NJ								
1H-Indene, 2,3-dihydro-5-methyl- - TIC	874-35-1												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	2.0	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7												
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2	14	---	ug/l	NJ								
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9	6.0	---	ug/l	NJ								
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4												
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6	23	---	ug/l	NJ								
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.27	1.0	ug/l	UB
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	27	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	0.35	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	2.4	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7	17	---	ug/l	NJ								
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Indane - TIC	496-11-7	12	---	ug/l	NJ								
Isopropylbenzene	98-82-8	0.75	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	0.67	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Naphthalene - TIC	91-20-3												
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic1	5.8	---	ug/l	NJ								
Unknown - TIC	Tic2	7.9	---	ug/l	NJ								
Unknown - TIC	Tic3	6.2	---	ug/l	NJ								
Unknown - TIC	Tic4	5.6	---	ug/l	NJ								
Unknown - TIC	Tic5	6.3	---	ug/l	NJ								
Unknown - TIC	Tic6	7.7	---	ug/l	NJ								
Unknown - TIC	Tic7												
Unknown - TIC	Tic8												
Unknown - TIC	Tic9												
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-11R-082218				RW-5A-082218				OB-21-082218			
		Lab Sample ID:	46016318810				46016318811				46016318812			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
				Report		Valid		Report		Valid		Report		Valid
Analyte	Cas No.		Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
OSW-8260CSIM														
1,2,3-Trichloropropane	96-18-4		ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8		ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4		ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
OSW-8270D														
1,1'-Biphenyl	92-52-4		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,2'-oxybis[1-chloropropane]	108-60-1		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5		ND	21	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2		ND	2.1	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2		ND	2.1	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7		ND	10	ug/l	---	ND	10	ug/l	UJ	ND	10	ug/l	UJ
2-Nitroaniline	88-74-4		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1		ND	21	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7		ND	21	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
Acenaphthene	83-32-9		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9		ND	2.1	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde	100-52-7		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6													
Benzo[g,h,i]perylene	191-24-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7		ND	2.1	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2		ND	10	ug/l	---	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Carbazole	86-74-8		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9		ND	2.1	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Di-n-butyl phthalate	84-74-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dimethyl phthalate	131-11-3		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluoranthene	206-44-0		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluorene	86-73-7		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexachlorocyclopentadiene	77-47-4		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachloroethane	67-72-1		ND	2.1	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8													
Isophorone	78-59-1		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene	91-20-3		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene, 2,3-dimethyl- - TIC	581-40-8													
Nitrobenzene	98-95-3		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Phenanthrene	85-01-8		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Phenol	108-95-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Pyrene	129-00-0		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Unknown - TIC	Tic1		11	---	ug/l	NJ	150	---	ug/l	NJ	140	---	ug/l	NJ
Unknown - TIC	Tic2						120	---	ug/l	NJ	110	---	ug/l	NJ
Unknown - TIC	Tic3						16	---	ug/l	NJ	14	---	ug/l	NJ

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-11R-082218				RW-5A-082218				OB-21-082218			
		Lab Sample ID:	46016318810				46016318811				46016318812			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	3.7	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.052	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.052	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.052	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.031	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.052	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.021	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.052	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.21	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.21	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.42	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1221	11104-28-2	ND	0.42	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1232	11141-16-5	ND	0.42	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1242	53469-21-9	ND	0.42	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1248	12672-29-6	ND	0.42	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1254	11097-69-1	ND	0.42	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1260	11096-82-5	ND	0.42	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1262	37324-23-5	ND	0.42	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1268	11100-14-4	ND	0.42	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.42	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	109	40.0	ug/l	---	69.1	40.0	ug/l	---	649	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	25.8	2.0	ug/l	---	2.1	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	92.9	4.0	ug/l	---	8.5	4.0	ug/l	---	7.2	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	45.0	4.0	ug/l	---	7.8	4.0	ug/l	---	3.4	4.0	ug/l	J
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	55800	200	ug/l	---	39800	200	ug/l	---	10300	200	ug/l	---
	Calcium - Dissolved	7440-70-2	54300	200	ug/l	---	42000	200	ug/l	---	11100	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	1.4	4.0	ug/l	J
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	2.5	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	1.9	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	9.5	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	76100	120	ug/l	---	1000	120	ug/l	---	1190	120	ug/l	---
	Iron - Dissolved	7439-89-6	8220	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	0.70	1.2	ug/l	J
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	7780	200	ug/l	---	5950	200	ug/l	---	5030	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	6520	200	ug/l	---	5370	200	ug/l	---	4550	200	ug/l	---
	Manganese	7439-96-5	10800	40.0	ug/l	---	293	8.0	ug/l	---	87.9	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	9950	8.0	ug/l	---	212	8.0	ug/l	---	ND	8.0	ug/l	---
	Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	2.5	4.0	ug/l	J
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	2950	200	ug/l	---	4080	200	ug/l	---	1120	200	ug/l	---
	Potassium - Dissolved	7440-09-7	2830	200	ug/l	---	4210	200	ug/l	---	994	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	4150	200	ug/l	---	4450	200	ug/l	---	4060	200	ug/l	---
	Sodium - Dissolved	7440-23-5	3240	200	ug/l	---	3720	200	ug/l	---	3390	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	1.2	4.0	ug/l	J
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	7.2	16.0	ug/l	J
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

			Sample Name:	OB-11R-082218				RW-5A-082218				OB-21-082218			
			Lab Sample ID:	46016318810				46016318811				46016318812			
			Sample Date:	8/22/2018				8/22/2018				8/22/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	0.0061	0.010	mg/l	J	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	2.05	0.12	mg/l	---	1.90	0.12	mg/l	---	1.66	0.12	mg/l	---
	Sulfate	14808-79-8	ND	0.60	mg/l	---	8.72	0.60	mg/l	---	7.63	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	227	5.0	mg/l	---	129	5.0	mg/l	---	45.4	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	227	5.0	mg/l	---	129	5.0	mg/l	---	45.4	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-27-082218				OB-30B-082218				OB-31-082218			
		Lab Sample ID:	46016318813				46016318814				46016318815			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
				Report		Valid		Report		Valid		Report		Valid
Analyte	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	3.1	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	0.45	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Phenyl-1-butene - TIC	824-90-8												
1H-Indene, 2,3-dihydro-1,3-dimethyl- - TIC	4175-53-5									9.6	---	ug/l	NJ
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2	28	---	ug/l	NJ								
1H-Indene, 2,3-dihydro-5-methyl- - TIC	874-35-1	46	---	ug/l	NJ								
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	3.3	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7	21	---	ug/l	NJ								
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2												
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9												
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4	15	---	ug/l	NJ								
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6												
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	180	1.0	ug/l	---	ND	1.0	ug/l	---	6.4	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	0.43	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	1.4	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7												
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Indane - TIC	496-11-7	24	---	ug/l	NJ								
Isopropylbenzene	98-82-8	3.2	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	0.93	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	1.1	1.0	ug/l	B	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Naphthalene - TIC	91-20-3	10	---	ug/l	NJ								
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	0.48	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic1	13	---	ug/l	NJ					6.1	---	ug/l	NJ
Unknown - TIC	Tic2	9.3	---	ug/l	NJ					8.7	---	ug/l	NJ
Unknown - TIC	Tic3	16	---	ug/l	NJ					7.8	---	ug/l	NJ
Unknown - TIC	Tic4	9.0	---	ug/l	NJ					5.2	---	ug/l	NJ
Unknown - TIC	Tic5	8.9	---	ug/l	NJ								
Unknown - TIC	Tic6	12	---	ug/l	NJ								
Unknown - TIC	Tic7	13	---	ug/l	NJ								
Unknown - TIC	Tic8	9.1	---	ug/l	NJ								
Unknown - TIC	Tic9	9.6	---	ug/l	NJ								
Vinyl chloride	75-01-4	0.29	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	7.4	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-27-082218				OB-30B-082218				OB-31-082218			
		Lab Sample ID:	46016318813				46016318814				46016318815			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
OSW-8270D													
1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	21	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	UJ
2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	21	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	21	ug/l	---	ND	20	ug/l	---
Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6	9.0	---	ug/l	NJ								
Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	UJ
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.0	ug/l	---
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.0	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8												
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene	91-20-3	3.2	10	ug/l	J	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene, 2,3-dimethyl- - TIC	581-40-8	7.8	---	ug/l	NJ								
Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Unknown - TIC	Tic1	7.3	---	ug/l	NJ								
Unknown - TIC	Tic2												
Unknown - TIC	Tic3												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-27-082218				OB-30B-082218				OB-31-082218			
		Lab Sample ID:	46016318813				46016318814				46016318815			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	17	0.20	ug/l	---	ND	0.20	ug/l	---	1.1	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.052	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.052	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.052	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.031	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.052	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.021	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.052	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.21	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.21	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1221	11104-28-2	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1232	11141-16-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1242	53469-21-9	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1248	12672-29-6	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1254	11097-69-1	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1260	11096-82-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1262	37324-23-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1268	11100-14-4	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	594	40.0	ug/l	---	40.3	40.0	ug/l	---	37.3	40.0	ug/l	J
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	25.4	2.0	ug/l	---	ND	2.0	ug/l	---	15.0	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	68.2	4.0	ug/l	---	24.1	4.0	ug/l	---	36.8	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	46.7	4.0	ug/l	---	24.9	4.0	ug/l	---	26.3	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	33300	200	ug/l	---	18800	200	ug/l	---	21400	200	ug/l	---
	Calcium - Dissolved	7440-70-2	34800	200	ug/l	---	19700	200	ug/l	---	20900	200	ug/l	---
	Chromium	7440-47-3	1.4	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	4.4	4.0	ug/l	---	1.7	4.0	ug/l	J	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	3.3	4.0	ug/l	J	1.3	4.0	ug/l	J	ND	4.0	ug/l	---
	Copper	7440-50-8	3.6	4.0	ug/l	J	2.8	4.0	ug/l	J	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	2.0	4.0	ug/l	J	ND	4.0	ug/l	---
	Iron	7439-89-6	52300	120	ug/l	---	59.6	120	ug/l	J	41300	120	ug/l	---
	Iron - Dissolved	7439-89-6	6620	120	ug/l	---	ND	120	ug/l	---	2260	120	ug/l	---
	Lead	7439-92-1	1.1	1.2	ug/l	J	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	4820	200	ug/l	---	4800	200	ug/l	---	3790	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	4230	200	ug/l	---	4310	200	ug/l	---	3250	200	ug/l	---
	Manganese	7439-96-5	6350	8.0	ug/l	---	1220	8.0	ug/l	---	4680	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	6740	8.0	ug/l	---	1180	8.0	ug/l	---	4660	8.0	ug/l	---
	Nickel	7440-02-0	3.4	4.0	ug/l	J	2.9	4.0	ug/l	J	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	1.4	4.0	ug/l	J	2.1	4.0	ug/l	J	ND	4.0	ug/l	---
	Potassium	7440-09-7	1870	200	ug/l	---	2780	200	ug/l	---	1290	200	ug/l	---
	Potassium - Dissolved	7440-09-7	1840	200	ug/l	---	2800	200	ug/l	---	1250	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	3660	200	ug/l	---	23100	200	ug/l	---	3510	200	ug/l	---
	Sodium - Dissolved	7440-23-5	2930	200	ug/l	---	20900	200	ug/l	---	2780	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	1.6	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	9.2	16.0	ug/l	J	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-27-082218				OB-30B-082218				OB-31-082218			
		Lab Sample ID:	46016318813				46016318814				46016318815			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	0.0056	0.010	mg/l	J	0.0022	0.010	mg/l	J	0.0049	0.010	mg/l	J
	OSW-9056A													
	Chloride	16887-00-6	2.04	0.12	mg/l	---	20.1	0.96	mg/l	---	1.60	0.12	mg/l	---
	Sulfate	14808-79-8	ND	0.60	mg/l	---	14.7	0.60	mg/l	---	ND	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	159	5.0	mg/l	---	73.9	5.0	mg/l	---	91.7	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	159	5.0	mg/l	---	73.9	5.0	mg/l	---	91.7	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	RW-7-082218				TB-02-082318				FB-03-082318			
		Lab Sample ID:	46016318816				46016318817				46016318818			
		Sample Date:	8/22/2018				8/23/2018				8/23/2018			
				Report		Valid		Report		Valid		Report		Valid
Analyte	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Phenyl-1-butene - TIC	824-90-8												
1H-Indene, 2,3-dihydro-1,3-dimethyl- - TIC	4175-53-5												
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2												
1H-Indene, 2,3-dihydro-5-methyl- - TIC	874-35-1												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7												
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2												
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9												
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4												
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6												
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	0.54	1.0	ug/l	J	0.51	1.0	ug/l	UB
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7												
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	1.5	1.0	ug/l	---
Naphthalene - TIC	91-20-3												
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
Unknown - TIC	Tic3												
Unknown - TIC	Tic4												
Unknown - TIC	Tic5												
Unknown - TIC	Tic6												
Unknown - TIC	Tic7												
Unknown - TIC	Tic8												
Unknown - TIC	Tic9												
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	RW-7-082218				TB-02-082318				FB-03-082318			
		Lab Sample ID:	46016318816				46016318817				46016318818			
		Sample Date:	8/22/2018				8/23/2018				8/23/2018			
				Report		Valid		Report		Valid		Report		Valid
Analyte	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
OSW-8270D													
1,1'-Biphenyl	92-52-4	ND	10	ug/l	---					ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---					ND	10	ug/l	---
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---					ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---					ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---					ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---					ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---					ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---					ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---					ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---					ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---					ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---					ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---					ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	10	ug/l	---					ND	10	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	UJ					ND	10	ug/l	UJ
2-Nitroaniline	88-74-4	ND	10	ug/l	---					ND	10	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---					ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---					ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	10	ug/l	---					ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---					ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---					ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---					ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---					ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---					ND	10	ug/l	---
4-Methylphenol	106-44-5	ND	10	ug/l	---					ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	10	ug/l	---					ND	10	ug/l	---
4-Nitrophenol	100-02-7	ND	20	ug/l	---					ND	20	ug/l	---
Acenaphthene	83-32-9	ND	10	ug/l	---					ND	10	ug/l	---
Acenaphthylene	208-96-8	ND	10	ug/l	---					ND	10	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---					ND	10	ug/l	---
Anthracene	120-12-7	ND	10	ug/l	---					ND	10	ug/l	---
Atrazine	1912-24-9	ND	2.0	ug/l	---					ND	2.0	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---					ND	10	ug/l	---
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6												
Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---					ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---					ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---					ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---					ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	UJ					ND	10	ug/l	UJ
Carbazole	86-74-8	ND	10	ug/l	---					ND	10	ug/l	---
Chrysene	218-01-9	ND	2.0	ug/l	---					ND	2.0	ug/l	---
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---					ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---					ND	10	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---					ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---					ND	10	ug/l	---
Dimethyl phthalate	131-11-3	ND	10	ug/l	---					ND	10	ug/l	---
Fluoranthene	206-44-0	ND	10	ug/l	---					ND	10	ug/l	---
Fluorene	86-73-7	ND	10	ug/l	---					ND	10	ug/l	---
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---					ND	10	ug/l	---
Hexachloroethane	67-72-1	ND	2.0	ug/l	---					ND	2.0	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8												
Isophorone	78-59-1	ND	10	ug/l	---					ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---					ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---					ND	10	ug/l	---
Naphthalene	91-20-3	ND	10	ug/l	---					ND	10	ug/l	---
Naphthalene, 2,3-dimethyl- - TIC	581-40-8												
Nitrobenzene	98-95-3	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Phenanthrene	85-01-8	ND	10	ug/l	---					ND	10	ug/l	---
Phenol	108-95-2	ND	10	ug/l	---					ND	10	ug/l	---
Pyrene	129-00-0	ND	10	ug/l	---					ND	10	ug/l	---
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
Unknown - TIC	Tic3												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	RW-7-082218				TB-02-082318				FB-03-082318			
		Lab Sample ID:	46016318816				46016318817				46016318818			
		Sample Date:	8/22/2018				8/23/2018				8/23/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---					ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---					ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---					ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---					ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---					ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---					ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---					ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---					ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---					ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---					ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.42	ug/l	---					ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.42	ug/l	---					ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.42	ug/l	---					ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.42	ug/l	---					ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.42	ug/l	---					ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.42	ug/l	---					ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.42	ug/l	---					ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.42	ug/l	---					ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.42	ug/l	---					ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.42	ug/l	---					ND	0.40	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	224	40.0	ug/l	---					ND	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---					ND	40.0	ug/l	---
	Antimony	7440-36-0	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Barium	7440-39-3	2.3	4.0	ug/l	J					ND	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	1.6	4.0	ug/l	J					ND	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---					ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---					ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Calcium	7440-70-2	10600	200	ug/l	---					ND	200	ug/l	---
	Calcium - Dissolved	7440-70-2	11300	200	ug/l	---					ND	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---					ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---					ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---					ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---					ND	4.0	ug/l	---
	Copper	7440-50-8	2.4	4.0	ug/l	J					ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---					ND	4.0	ug/l	---
	Iron	7439-89-6	611	120	ug/l	---					ND	120	ug/l	---
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---					ND	120	ug/l	---
	Lead	7439-92-1	0.38	1.2	ug/l	J					ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---					ND	1.2	ug/l	---
	Magnesium	7439-95-4	4230	200	ug/l	---					ND	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	3860	200	ug/l	---					ND	200	ug/l	---
	Manganese	7439-96-5	6.5	8.0	ug/l	J					ND	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	ND	8.0	ug/l	---					ND	8.0	ug/l	---
	Nickel	7440-02-0	ND	4.0	ug/l	---					ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---					ND	4.0	ug/l	---
	Potassium	7440-09-7	967	200	ug/l	---					ND	200	ug/l	---
	Potassium - Dissolved	7440-09-7	946	200	ug/l	---					ND	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---					ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---					ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---					ND	2.0	ug/l	---
	Sodium	7440-23-5	4160	200	ug/l	---					ND	200	ug/l	---
	Sodium - Dissolved	7440-23-5	3430	200	ug/l	---					ND	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---					ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---					ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---					ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---					ND	4.0	ug/l	---
	Zinc	7440-66-6	7.2	16.0	ug/l	J					ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---					ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---					ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---					ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	RW-7-082218				TB-02-082318				FB-03-082318			
		Lab Sample ID:	46016318816				46016318817				46016318818			
		Sample Date:	8/22/2018				8/23/2018				8/23/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---					ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	1.79	0.12	mg/l	---					ND	0.12	mg/l	---
	Sulfate	14808-79-8	8.93	0.60	mg/l	---					ND	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	42.3	5.0	mg/l	---					ND	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	42.3	5.0	mg/l	---					ND	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-13-082218				OB-10-082218				OB-29-082218			
		Lab Sample ID:	4601631882				4601631883				4601631884			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Phenyl-1-butene - TIC	824-90-8												
1H-Indene, 2,3-dihydro-1,3-dimethyl- - TIC	4175-53-5												
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2												
1H-Indene, 2,3-dihydro-5-methyl- - TIC	874-35-1												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7												
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2												
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9												
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4												
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6												
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	0.47	1.0	ug/l	UB	0.40	1.0	ug/l	UB	0.28	1.0	ug/l	UB
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7												
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Naphthalene - TIC	91-20-3												
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
Unknown - TIC	Tic3												
Unknown - TIC	Tic4												
Unknown - TIC	Tic5												
Unknown - TIC	Tic6												
Unknown - TIC	Tic7												
Unknown - TIC	Tic8												
Unknown - TIC	Tic9												
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-13-082218				OB-10-082218				OB-29-082218			
		Lab Sample ID:	4601631882				4601631883				4601631884			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
				Report		Valid		Report		Valid		Report		Valid
Analyte	Cas No.		Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
OSW-8260CSIM														
1,2,3-Trichloropropane	96-18-4		ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8		ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4		ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
OSW-8270D														
1,1'-Biphenyl	92-52-4		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,2'-oxybis[1-chloropropane]	108-60-1		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5		ND	20	ug/l	---	ND	21	ug/l	---	ND	21	ug/l	---
2,4-Dinitrotoluene	121-14-2		ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.1	ug/l	---
2,6-Dinitrotoluene	606-20-2		ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.1	ug/l	---
2-Chloronaphthalene	91-58-7		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7		ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
2-Nitroaniline	88-74-4		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1		ND	20	ug/l	---	ND	21	ug/l	---	ND	21	ug/l	---
4-Bromophenyl phenyl ether	101-55-3		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7		ND	20	ug/l	---	ND	21	ug/l	---	ND	21	ug/l	---
Acenaphthene	83-32-9		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9		ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.1	ug/l	---
Benzaldehyde	100-52-7		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6													
Benzo[g,h,i]perylene	191-24-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7		ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.1	ug/l	---
Butyl benzyl phthalate	85-68-7		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2		ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Carbazole	86-74-8		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9		ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.1	ug/l	---
Di-n-butyl phthalate	84-74-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dimethyl phthalate	131-11-3		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluoranthene	206-44-0		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluorene	86-73-7		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexachlorocyclopentadiene	77-47-4		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachloroethane	67-72-1		ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.1	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8													
Isophorone	78-59-1		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene	91-20-3		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene, 2,3-dimethyl- - TIC	581-40-8													
Nitrobenzene	98-95-3		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Phenanthrene	85-01-8		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Phenol	108-95-2		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Pyrene	129-00-0		ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Unknown - TIC	Tic1										11	---	ug/l	NJ
Unknown - TIC	Tic2													
Unknown - TIC	Tic3													

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-13-082218				OB-10-082218				OB-29-082218			
		Lab Sample ID:	4601631882				4601631883				4601631884			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.052	ug/l	---	0.036	0.052	ug/l	J
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.052	ug/l	---	0.046	0.052	ug/l	J
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.052	ug/l	---	0.071	0.052	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.031	ug/l	---	ND	0.031	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.052	ug/l	---	ND	0.052	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.021	ug/l	---	ND	0.021	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.052	ug/l	---	0.076	0.052	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.21	ug/l	---	ND	0.21	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.21	ug/l	---	ND	0.21	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	43.1	40.0	ug/l	---	19.2	40.0	ug/l	J	624	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	4.8	4.0	ug/l	---	6.7	4.0	ug/l	---	10.4	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	4.2	4.0	ug/l	---	6.3	4.0	ug/l	---	6.2	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	7410	200	ug/l	---	13500	200	ug/l	---	13300	200	ug/l	---
	Calcium - Dissolved	7440-70-2	7490	200	ug/l	---	13600	200	ug/l	---	13700	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	1.4	4.0	ug/l	J
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	2.3	4.0	ug/l	J
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	ND	120	ug/l	---	214	120	ug/l	---	949	120	ug/l	---
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	0.42	1.2	ug/l	J
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	2890	200	ug/l	---	4340	200	ug/l	---	4490	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	2580	200	ug/l	---	3810	200	ug/l	---	3780	200	ug/l	---
	Manganese	7439-96-5	ND	8.0	ug/l	---	30.0	8.0	ug/l	---	23.0	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	ND	8.0	ug/l	---	ND	8.0	ug/l	---	ND	8.0	ug/l	---
	Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	1.6	4.0	ug/l	J
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	1300	200	ug/l	---	1260	200	ug/l	---	1390	200	ug/l	---
	Potassium - Dissolved	7440-09-7	1280	200	ug/l	---	1260	200	ug/l	---	1270	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	3590	200	ug/l	---	3970	200	ug/l	---	3960	200	ug/l	---
	Sodium - Dissolved	7440-23-5	2950	200	ug/l	---	3210	200	ug/l	---	3180	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	1.4	4.0	ug/l	J
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	80.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-13-082218				OB-10-082218				OB-29-082218			
		Lab Sample ID:	4601631882				4601631883				4601631884			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
	Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	0.0027	0.010	mg/l	J
	OSW-9056A													
	Chloride	16887-00-6	2.79	0.12	mg/l	---	4.33	0.12	mg/l	---	4.26	0.12	mg/l	---
	Sulfate	14808-79-8	8.47	0.60	mg/l	---	5.57	0.60	mg/l	---	5.55	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	25.7	5.0	mg/l	---	47.1	5.0	mg/l	---	46.9	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	25.7	5.0	mg/l	---	47.1	5.0	mg/l	---	46.9	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-15B-082218				OB-33-082218				OB-32-082218			
		Lab Sample ID:	4601631885				4601631886				4601631887			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Phenyl-1-butene - TIC	824-90-8												
1H-Indene, 2,3-dihydro-1,3-dimethyl- - TIC	4175-53-5												
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2												
1H-Indene, 2,3-dihydro-5-methyl- - TIC	874-35-1												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7												
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2												
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9												
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4												
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6												
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	0.26	1.0	ug/l	UB	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7												
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	0.34	1.0	ug/l	UB	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Naphthalene - TIC	91-20-3												
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
Unknown - TIC	Tic3												
Unknown - TIC	Tic4												
Unknown - TIC	Tic5												
Unknown - TIC	Tic6												
Unknown - TIC	Tic7												
Unknown - TIC	Tic8												
Unknown - TIC	Tic9												
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-15B-082218				OB-33-082218				OB-32-082218			
		Lab Sample ID:	4601631885				4601631886				4601631887			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
				Report		Valid		Report		Valid		Report		Valid
Analyte	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
OSW-8270D													
1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6												
Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8												
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene, 2,3-dimethyl- - TIC	581-40-8												
Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
Unknown - TIC	Tic3												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-15B-082218				OB-33-082218				OB-32-082218			
		Lab Sample ID:	4601631885				4601631886				4601631887			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
				Report		Valid		Report		Valid		Report		Valid
	Analyte	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1221	11104-28-2	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1232	11141-16-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1242	53469-21-9	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1248	12672-29-6	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1254	11097-69-1	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1260	11096-82-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1262	37324-23-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1268	11100-14-4	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	67.5	40.0	ug/l	---	412	40.0	ug/l	---	52.1	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	0.98	2.0	ug/l	J	ND	2.0	ug/l	---	14.8	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	0.82	2.0	ug/l	J	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	26.5	4.0	ug/l	---	22.8	4.0	ug/l	---	46.4	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	ND	4.0	ug/l	---	18.8	4.0	ug/l	---	26.2	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	21400	200	ug/l	---	12300	200	ug/l	---	30200	200	ug/l	---
	Calcium - Dissolved	7440-70-2	21900	200	ug/l	---	12600	200	ug/l	---	29900	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	4.9	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	423	120	ug/l	---	519	120	ug/l	---	51700	120	ug/l	---
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---	2950	120	ug/l	---
	Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	6190	200	ug/l	---	5930	200	ug/l	---	4410	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	5440	200	ug/l	---	5090	200	ug/l	---	3820	200	ug/l	---
	Manganese	7439-96-5	2380	8.0	ug/l	---	24.3	8.0	ug/l	---	6240	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	147	8.0	ug/l	---	ND	8.0	ug/l	---	6310	8.0	ug/l	---
	Nickel	7440-02-0	6.1	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	704	200	ug/l	---	1060	200	ug/l	---	2220	200	ug/l	---
	Potassium - Dissolved	7440-09-7	695	200	ug/l	---	944	200	ug/l	---	2190	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	4320	200	ug/l	---	5890	200	ug/l	---	3820	200	ug/l	---
	Sodium - Dissolved	7440-23-5	3540	200	ug/l	---	4800	200	ug/l	---	3050	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	2.0	4.0	ug/l	J	2.0	4.0	ug/l	J	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

		Sample Name:	OB-15B-082218				OB-33-082218				OB-32-082218			
		Lab Sample ID:	4601631885				4601631886				4601631887			
		Sample Date:	8/22/2018				8/22/2018				8/22/2018			
	Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	0.0072	0.010	mg/l	J
	OSW-9056A													
	Chloride	16887-00-6	1.79	0.12	mg/l	---	1.73	0.12	mg/l	---	2.21	0.12	mg/l	---
	Sulfate	14808-79-8	12.2	0.60	mg/l	---	12.6	0.60	mg/l	---	ND	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	71.0	5.0	mg/l	---	49.9	5.0	mg/l	---	128	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	71.0	5.0	mg/l	---	49.9	5.0	mg/l	---	128	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

Sample Name: OB-19-082218
Lab Sample ID: 4601631889
Sample Date: 8/22/2018

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC					
OSW-8260C					
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---
1-Phenyl-1-butene - TIC	824-90-8				
1H-Indene, 2,3-dihydro-1,3-dimethyl- - TIC	4175-53-5				
1H-Indene, 2,3-dihydro-1,6-dimethyl- - TIC	17059-48-2				
1H-Indene, 2,3-dihydro-5-methyl- - TIC	874-35-1				
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7				
Benzene, 1,2,4,5-tetramethyl- - TIC	95-93-2				
Benzene, 1-ethyl-2,4-dimethyl- - TIC	874-41-9				
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4				
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6				
Bromoform	75-25-2	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	0.23	1.0	ug/l	UB
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---
Chloroethane	75-00-3	1.2	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7				
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---
Indane - TIC	496-11-7				
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---
Naphthalene - TIC	91-20-3				
Styrene	100-42-5	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---
Unknown - TIC	Tic1				
Unknown - TIC	Tic2				
Unknown - TIC	Tic3				
Unknown - TIC	Tic4				
Unknown - TIC	Tic5				
Unknown - TIC	Tic6				
Unknown - TIC	Tic7				
Unknown - TIC	Tic8				
Unknown - TIC	Tic9				
Vinyl chloride	75-01-4	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

Sample Name: OB-19-082218
Lab Sample ID: 4601631889
Sample Date: 8/22/2018

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
OSW-8260CSIM					
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---
OSW-8270D					
1,1'-Biphenyl	92-52-4	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	21	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	2.1	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	2.1	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	10	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	---
2-Nitroaniline	88-74-4	ND	10	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	21	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---
4-Methylphenol	106-44-5	ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	10	ug/l	---
4-Nitrophenol	100-02-7	ND	21	ug/l	---
Acenaphthene	83-32-9	ND	10	ug/l	---
Acenaphthylene	208-96-8	ND	10	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---
Anthracene	120-12-7	ND	10	ug/l	---
Atrazine	1912-24-9	ND	2.1	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6				
Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.1	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	---
Carbazole	86-74-8	ND	10	ug/l	---
Chrysene	218-01-9	ND	2.1	ug/l	---
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---
Dimethyl phthalate	131-11-3	ND	10	ug/l	---
Fluoranthene	206-44-0	ND	10	ug/l	---
Fluorene	86-73-7	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---
Hexachloroethane	67-72-1	ND	2.1	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8	8.8	---	ug/l	NJ
Isophorone	78-59-1	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---
Naphthalene	91-20-3	ND	10	ug/l	---
Naphthalene, 2,3-dimethyl- - TIC	581-40-8				
Nitrobenzene	98-95-3	ND	1.0	ug/l	---
Phenanthrene	85-01-8	ND	10	ug/l	---
Phenol	108-95-2	ND	10	ug/l	---
Pyrene	129-00-0	ND	10	ug/l	---
Unknown - TIC	Tic1				
Unknown - TIC	Tic2				
Unknown - TIC	Tic3				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

Sample Name: OB-19-082218
Lab Sample ID: 4601631889
Sample Date: 8/22/2018

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM					
1,4-Dioxane	123-91-1	0.97	0.20	ug/l	---
Benzo[a]anthracene	56-55-3	ND	0.052	ug/l	---
Benzo[a]pyrene	50-32-8	ND	0.052	ug/l	---
Benzo[b]fluoranthene	205-99-2	ND	0.052	ug/l	---
Bis(2-chloroethyl)ether	111-44-4	ND	0.031	ug/l	---
Dibenz(a,h)anthracene	53-70-3	ND	0.052	ug/l	---
Hexachlorobenzene	118-74-1	ND	0.021	ug/l	---
Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.052	ug/l	---
N-Nitrosodimethylamine	62-75-9	ND	0.21	ug/l	---
Pentachlorophenol	87-86-5	ND	0.21	ug/l	---
GC Other					
OSW-8082A					
PCB-1016	12674-11-2	ND	0.42	ug/l	---
PCB-1221	11104-28-2	ND	0.42	ug/l	---
PCB-1232	11141-16-5	ND	0.42	ug/l	---
PCB-1242	53469-21-9	ND	0.42	ug/l	---
PCB-1248	12672-29-6	ND	0.42	ug/l	---
PCB-1254	11097-69-1	ND	0.42	ug/l	---
PCB-1260	11096-82-5	ND	0.42	ug/l	---
PCB-1262	37324-23-5	ND	0.42	ug/l	---
PCB-1268	11100-14-4	ND	0.42	ug/l	---
Polychlorinated biphenyls, Total	1336-36-3	ND	0.42	ug/l	---
Metals					
OSW-6020B					
Aluminum	7429-90-5	195	40.0	ug/l	---
Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---
Antimony	7440-36-0	ND	2.0	ug/l	---
Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---
Arsenic	7440-38-2	0.82	2.0	ug/l	J
Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---
Barium	7440-39-3	103	4.0	ug/l	---
Barium - Dissolved	7440-39-3	98.0	4.0	ug/l	---
Beryllium	7440-41-7	ND	0.80	ug/l	---
Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---
Cadmium	7440-43-9	ND	2.0	ug/l	---
Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---
Calcium	7440-70-2	15600	200	ug/l	---
Calcium - Dissolved	7440-70-2	16300	200	ug/l	---
Chromium	7440-47-3	1.4	4.0	ug/l	J
Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---
Cobalt	7440-48-4	ND	4.0	ug/l	---
Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---
Copper	7440-50-8	4.5	4.0	ug/l	---
Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---
Iron	7439-89-6	22100	120	ug/l	---
Iron - Dissolved	7439-89-6	ND	120	ug/l	---
Lead	7439-92-1	1.8	1.2	ug/l	---
Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---
Magnesium	7439-95-4	3180	200	ug/l	---
Magnesium - Dissolved	7439-95-4	2830	200	ug/l	---
Manganese	7439-96-5	316	8.0	ug/l	---
Manganese - Dissolved	7439-96-5	291	8.0	ug/l	---
Nickel	7440-02-0	1.4	4.0	ug/l	J
Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---
Potassium	7440-09-7	1180	200	ug/l	---
Potassium - Dissolved	7440-09-7	1190	200	ug/l	---
Selenium	7782-49-2	ND	10.0	ug/l	---
Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---
Silver	7440-22-4	ND	2.0	ug/l	---
Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---
Sodium	7440-23-5	3350	200	ug/l	---
Sodium - Dissolved	7440-23-5	2810	200	ug/l	---
Thallium	7440-28-0	ND	0.80	ug/l	---
Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---
Vanadium	7440-62-2	2.8	4.0	ug/l	J
Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---
Zinc	7440-66-6	17.7	16.0	ug/l	---
Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---
OSW-7470A					
Mercury	7439-97-6	ND	0.20	ug/l	---
Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163188-1

Sample Name: OB-19-082218
Lab Sample ID: 4601631889
Sample Date: 8/22/2018

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
General Chemistry					
OSW-9012B					
Cyanide, Total	57-12-5	0.0025	0.010	mg/l	J
OSW-9056A					
Chloride	16887-00-6	1.51	0.12	mg/l	---
Sulfate	14808-79-8	2.03	0.60	mg/l	---
Prep					
APHA-2320B					
Alkalinity	E-14506	57.9	5.0	mg/l	---
Bicarbonate Alkalinity as CaCO3	E-14508	57.9	5.0	mg/l	---

September 17, 2018

Tim Roeper
Cornerstone EG
100 Crystal Run Road
Suite 101
Middletown, NY 10941

CADENA project ID: E203361
Project: Ford Ringwood Mines Project
Project number:
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: TestAmerica - Edison
Laboratory submittal: 163302-1
Sample date: 2018-08-23 2018-08-24
Report received by CADENA: 2018-09-14
Initial Data Verification completed by CADENA: 2018-09-17

The following minor QC exceptions or missing information were noted:

TBK - TRIP BLANKS had detections BELOW the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 5X the blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags :
GCMS VOC - METHYLENE CHLORIDE - UB flag - sample -013.

FBK - FIELD BLANKS had detections BELOW the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 5X the blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags :
METALS - B flags - sample -014, -004 TOTAL AND DISSOLVED BARIUM.
METALS - UB flags - samples -012 and -013 TOTAL AND DISSOLVED BARIUM.
1,4-DIOXANE - B flags - samples -001, -002, -005 through -014, -016 through -019, -022.

TIC - Tentatively Identified Compounds (TIC's) detections reported for samples noted should all be considered to be estimated and qualified with NJ flags.
GCMS VOC
GCMS SVOC.

LCS - LCS recoveries were outliers biased LOW for these analytes (or one LCS and the associated LCS/LCSD RPD). The listed client sample results should be considered to be estimated and qualified with J flags if detected or UJ flags if non-detect: .
GCMS SVOC QC batch 547574 - HEXACHLOROBUTADIENE - UJ flags - samples -001 through -010.
GCMS SVOC QC batch 547599 - 2-METHYLPHENOL and CAPROLACTAM - UJ flags - samples -011, -012, -013, -014, -016, -017, -018, -019, -020, -022, -023.
GCMS SVOC QC batch 547757 - ATRAZINE - sample qualifications not required.

MSD - MS and MSD recovery outliers or one recovery and the MS/MSD RPD were outliers with the recovery biased LOW for these analytes. Results for the client sample spiked only should be considered to be estimated and qualified with a J flag if detected and UJ flags if non-detect for these analytes:
GCMS SVOC sample -021 - UJ flags - 2-METHYLPHENOL, 3-NITROANILINE. J flag - 1,4-DIOXANE.
GCMS SVOC sample -005 - UJ flags - 2-METHYLPHENOL, HEXACHLOROBUTADIENE.
METALS sample -005 - UJ flag - DISSOLVED ANTIMONY. J flag - DISSOLVED BARIUM.

MBK - METHOD BLANKS had detections BELOW the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 5X the method blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags :
TOTAL METALS - QC batch 548512 - LEAD - UB flags - samples -001, -002, -006, -007. B flags - samples -008.

GCMS VOC, GCMS VOC-SIM, GCMS SVOC, GCMS SVOC-SIM CCV/INTERNAL STANDARD response outliers as noted in the laboratory submittal case narrative were not used to qualify client sample results as part of this level 2 data package verification review.

SURROGATE recoveries were outside of laboratory control limits biased HIGH for only 1 fraction specific surrogate so qualification of client sample results noted below were not requried based on this QC outlier alone:
GCMS SVOC ACID FRACTION surrogates 1 of 3 biased high - samples -001, -005, -005MS, -005MSD, QC batch 547574/547599/548149 LCS.

MS/MSD recovery outliers or sample duplicate RPD outliers were not determined using a client sample from this submittal for the test and QC batch noted so qualification was not required based on these sample-specific QC outliers:
GCMS SVOC QC batch 547625.
PCB QC batch 548017.
METHOD 6020 TOTAL METALS QC batches 550221, 5485122.

LCS recoveries were outliers biased HIGH for these tests and analytes (or one LCS and the associated LCS/LCSD RPD). All associated client sample results were non-detect for these analytes so were not affected by the high bias and qualification was not required:
GCMS SVOC-SIM - QC batch 547574 - BENZO(A)ANTHRACENE, BENZO(A)PYRENE, BIS-2-CHLOROETHYLETHER, DIBENZO(AH)ANTHRACENE, HEXACHLOROBENZENE, INDENO(123CD)PYRENE.
GCMS SVOC-SIM - QC batch 547599 - DIBENZO(AH)ANTHRACENE, HEXACHLOROBENZENE, INDENO(123CD)PYRENE.
GCMS SVOC-SIM - QC batch 548149 - DIBENZO(AH)ANTHRACENE.
TOTAL CYANIDE - QC batch 548650.

MS/MSD spike concentrations were less than 4X the original sample concentration for the following analytes in the client sample noted so MS/MSD percent recoveries are not considered to be statistically reliable and were not used to qualify client sample results:
METHOD 8270-SIM ISOTOPIC DILUTION - sample -021 - 1,4-DIOXANE.
DISSOLVED METALS - sample -005 - SODIUM, MAGNESIUM, CALCIUM, MANGANESE.
DISSOLVED METALS - sample -021 - SODIUM, POTASSIUM, BARIUM, MANGANESE, MAGNESIUM, CALCIUM, IRON.
TOTAL METALS - sample -021 - BARIUM, MANGANESE, SODIUM, MAGNESIUM, CALCIUM, IRON.
TOTAL METALS - sample -005 - SODIUM, MAGNESIUM, CALCIUM, IRON.
ANIONS - samples -005 and -021 - CHLORIDE.

MS or MSD recoveries but not both or RPD only were outliers for the following analytes so results for the client sample spiked were not qualified based on these QC outliers alone:
DISSOLVED METALS - sample -021 - SELENIUM.
TOTAL CYANIDE - sample -005.

MS and MSD recovery outliers or one recovery and the MS/MSD RPD were outliers with the recovery biased HIGH for these analytes. Client sample results spiked as noted below were non-detect so qualification was not required based on these high bias QC outliers:
TOTAL CYANIDE - sample -011.

TBK - TRIP BLANKS had detections BELOW the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 5X the blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags :
GCMS VOC - METHYLENE CHLORIDE - UB flag - sample -013.

SAMPLE RECEIPT NARRATIVE - Laboratory submittal case narrative indicated that GCMS VOC analysis was not performed on client samples -001, -003, -004, -005, -007, -008, -009, -022 and MS/MSD for sample -005 due to headspace in sample vials. Samples were re-samples and analyzed in SDG 164119.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

20 Water sample(s), 2 field duplicates and 1 field blank were analyzed for GCMS VOC, GCMS SVOC, GC Other, Metals, General Chemistry and MISC parameter(s). 1 Trip blank was analyzed for GCMS VOC parameters.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, LCS/LCD RPD, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Edison
Laboratory Submittal: 163302-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	OSW-8270D	GCMS SVOC SIM	GCMS VOC SIM	OSW-8082A	METALS BY ICPMS(D)	METALS BY ICPMS	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE CYANIDE (AUTOMATED COLORIMETRIC, WITH OFF-LINE	Inorganic Anions by IC	Alkalinity Prep
4601633021	OB-20B-082318	8/23/2018	10:45:00		X	X		X	X	X	X	X	X	X	X
46016330210	SC-02-082318	8/23/2018	3:50:00	X	X	X	X	X	X	X	X	X	X	X	X
46016330211	OB-5-082318	8/23/2018	10:20:00	X	X	X	X	X	X	X	X	X	X	X	X
46016330212	Dup-02-082318	8/23/2018	12:00:00	X	X	X	X	X	X	X	X	X	X	X	X
46016330213	OB-12-082318	8/23/2018	11:50:00	X	X	X	X	X	X	X	X	X	X	X	X
46016330214	OB-2-082318	8/23/2018	2:20:00	X	X	X	X	X	X	X	X	X	X	X	X
46016330215	TB-03-082418	8/24/2018	12:00:00	X			X								
46016330216	RW-13 (71-91)-082418	8/24/2018	10:15:00	X	X	X	X	X	X	X	X	X	X	X	X
46016330217	OB-30A-082418	8/24/2018	12:20:00	X	X	X	X	X	X	X	X	X	X	X	X
46016330218	Dup-03-082418	8/24/2018	12:00:00	X	X	X	X	X	X	X	X	X	X	X	X
46016330219	PMS-50-082418	8/24/2018	8:50:00	X	X	X	X	X	X	X	X	X	X	X	X
4601633022	OB-20A-082318	8/23/2018	12:35:00	X	X	X	X	X	X	X	X	X	X	X	X
46016330220	PMS-180-082418	8/24/2018	9:40:00	X	X	X	X	X	X	X	X	X	X	X	X
46016330221	PMS-230-082418	8/24/2018	11:15:00	X	X	X	X	X	X	X	X	X	X	X	X
46016330222	SC-01-082418	8/24/2018	12:50:00		X	X		X	X	X	X	X	X	X	X
46016330223	FB-03-082418	8/24/2018	12:30:00	X	X	X	X	X	X	X	X	X	X	X	X
46016330224	RW-5-082418	8/24/2018	11:55:00	X	X	X	X	X	X	X	X	X	X	X	X
4601633023	RW-6-082318	8/23/2018	2:25:00		X	X		X	X	X	X	X	X	X	X
4601633024	RW-6A-082318	8/23/2018	3:45:00		X	X		X	X	X	X	X	X	X	X
4601633025	CMS-50-082318	8/23/2018	9:15:00		X	X		X	X	X	X	X	X	X	X
4601633026	OB-30C-082318	8/23/2018	2:55:00	X	X	X	X	X	X	X	X	X	X	X	X
4601633027	CMS-100-082318	8/23/2018	10:15:00		X	X		X	X	X	X	X	X	X	X
4601633028	CMS-160-082318	8/23/2018	11:35:00		X	X		X	X	X	X	X	X	X	X
4601633029	CMS-275-082318	8/23/2018	12:45:00		X	X		X	X	X	X	X	X	X	X

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	OB-20B-082318				SC-02-082318				OB-5-082318				Dup-02-082318				OB-12-082318			
		Lab Sample ID:	4601633021				46016330210				46016330211				46016330212				46016330213			
		Sample Date:	8/23/2018				8/23/2018				8/23/2018				8/23/2018				8/23/2018			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																						
OSW-8260C																						
1,4-Dioxane - TIC	123-91-1																					
1-Pentene, 2-methyl- - TIC	763-29-1																					
1-Phenyl-1-butene - TIC	824-90-8																					
2,3-Dihydroindene - TIC	496-11-7																					
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7																					
Benzene, 1-ethenyl-4-ethyl- - TIC	3454-07-7																					
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4																					
Cyclopentane, methyl- - TIC	96-37-7																					
Ethyl ether - TIC	60-29-7																					
Hexane - TIC	110-54-3																					
Indane - TIC	496-11-7																					
Methylene Chloride	75-09-2																		0.37	1.0	ug/l	UB
N-Propylbenzene - TIC	103-65-1																					
Naphthalene - TIC	91-20-3																					
p-Diethylbenzene - TIC	105-05-5																					
Tetrahydrofuran - TIC	109-99-9																					
GC/MS SVOC																						
OSW-8270D																						
2(3H)-Benzothiazolone - TIC	934-34-9																					
2-Methylphenol	95-48-7										ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
3-Nitroaniline	99-09-2																					
Benzene, (1-methylethyl)- - TIC	98-82-8																					
Benzene, chloro- - TIC	108-90-7																					
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8																					
Caprolactam	105-60-2										ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7																					
Cyclononasiloxane, octadecamethyl- - TIC	556-71-8										6.5	---	ug/l	NJ								
Hexachlorobutadiene	87-68-3		ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ												
Hexadecanoic acid, butyl ester - TIC	111-06-8						11	---	ug/l	NJ												
Unknown - TIC	Tic1																					
Unknown - TIC	Tic2																					
OSW-8270DSIM																						
1,4-Dioxane	123-91-1		0.59	0.20	ug/l	B	0.29	0.20	ug/l	B	0.32	0.20	ug/l	B	0.25	0.20	ug/l	B	0.28	0.20	ug/l	B
Metals																						
OSW-6020B																						
Antimony - Dissolved	7440-36-0																					
Barium	7440-39-3														2.3	4.0	ug/l	UB	2.3	4.0	ug/l	UB
Barium - Dissolved	7440-39-3														1.5	4.0	ug/l	UB	1.6	4.0	ug/l	UB
Lead	7439-92-1		0.43	1.2	ug/l	UB																

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	OB-2-082318				RW-13 (71-91)-082418				OB-30A-082418				Dup-03-082418				PMS-50-082418			
		Lab Sample ID:	46016330214				46016330216				46016330217				46016330218				46016330219			
		Sample Date:	8/23/2018				8/24/2018				8/24/2018				8/24/2018				8/24/2018			
Analyte	Cas No.		Report Limit	Units	Valid Qualifier		Report Limit	Units	Valid Qualifier		Report Limit	Units	Valid Qualifier		Report Limit	Units	Valid Qualifier		Report Limit	Units	Valid Qualifier	
GC/MS VOC																						
OSW-8260C																						
1,4-Dioxane - TIC	123-91-1																					
1-Pentene, 2-methyl- - TIC	763-29-1																					
1-Phenyl-1-butene - TIC	824-90-8																					
2,3-Dihydroindene - TIC	496-11-7																					
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7																					
Benzene, 1-ethenyl-4-ethyl- - TIC	3454-07-7																					
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4																					
Cyclopentane, methyl- - TIC	96-37-7																					
Ethyl ether - TIC	60-29-7																					
Hexane - TIC	110-54-3																					
Indane - TIC	496-11-7																					
Methylene Chloride	75-09-2																					
N-Propylbenzene - TIC	103-65-1																					
Naphthalene - TIC	91-20-3																					
p-Diethylbenzene - TIC	105-05-5																					
Tetrahydrofuran - TIC	109-99-9																					
GC/MS SVOC																						
OSW-8270D																						
2(3H)-Benzothiazolone - TIC	934-34-9																					
2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	
3-Nitroaniline	99-09-2																					
Benzene, (1-methylethyl)- - TIC	98-82-8																					
Benzene, chloro- - TIC	108-90-7																					
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8																					
Caprolactam	105-60-2	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7																					
Cyclononasiloxane, octadecamethyl- - TIC	556-71-8																					
Hexachlorobutadiene	87-68-3																					
Hexadecanoic acid, butyl ester - TIC	111-06-8																					
Unknown - TIC	Tic1																					
Unknown - TIC	Tic2																					
OSW-8270DSIM																						
1,4-Dioxane	123-91-1	0.25	0.20	ug/l	B	0.50	0.20	ug/l	B	0.34	0.20	ug/l	B	0.45	0.20	ug/l	B	0.41	0.20	ug/l	B	
Metals																						
OSW-6020B																						
Antimony - Dissolved	7440-36-0																					
Barium	7440-39-3	5.1	4.0	ug/l	B																	
Barium - Dissolved	7440-39-3	4.4	4.0	ug/l	B																	
Lead	7439-92-1																					

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	OB-20A-082318				PMS-180-082418				PMS-230-082418				SC-01-082418				FB-03-082418			
		Lab Sample ID:	4601633022				46016330220				46016330221				46016330222				46016330223			
		Sample Date:	8/23/2018				8/24/2018				8/24/2018				8/24/2018				8/24/2018			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																						
OSW-8260C																						
1,4-Dioxane - TIC	123-91-1										90	50	ug/l	NJ								
1-Pentene, 2-methyl- - TIC	763-29-1						6.3	---	ug/l	NJ												
1-Phenyl-1-butene - TIC	824-90-8						11	---	ug/l	NJ												
2,3-Dihydroindene - TIC	496-11-7										6.0	1.0	ug/l	NJ								
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7										6.8	---	ug/l	NJ								
Benzene, 1-ethenyl-4-ethyl- - TIC	3454-07-7										16	---	ug/l	NJ								
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4										7.0	---	ug/l	NJ								
Cyclopentane, methyl- - TIC	96-37-7										14	---	ug/l	NJ								
Ethyl ether - TIC	60-29-7										1.4	1.0	ug/l	NJ								
Hexane - TIC	110-54-3										0.75	1.0	ug/l	NJ								
Indane - TIC	496-11-7						11	---	ug/l	NJ												
Methylene Chloride	75-09-2																					
N-Propylbenzene - TIC	103-65-1										1.7	1.0	ug/l	NJ								
Naphthalene - TIC	91-20-3										9.8	1.0	ug/l	NJ								
p-Diethylbenzene - TIC	105-05-5										0.50	1.0	ug/l	NJ								
Tetrahydrofuran - TIC	109-99-9										4.3	2.0	ug/l	NJ								
GC/MS SVOC																						
OSW-8270D																						
2(3H)-Benzothiazolone - TIC	934-34-9										7.0	---	ug/l	NJ								
2-Methylphenol	95-48-7						ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
3-Nitroaniline	99-09-2										ND	10	ug/l	UJ								
Benzene, (1-methylethyl)- - TIC	98-82-8										8.8	---	ug/l	NJ								
Benzene, chloro- - TIC	108-90-7										9.1	---	ug/l	NJ								
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8						6.5	---	ug/l	NJ	11	---	ug/l	NJ	7.2	---	ug/l	NJ				
Caprolactam	105-60-2						ND	10	ug/l	UJ					ND	10	ug/l	UJ	ND	10	ug/l	UJ
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7						12	---	ug/l	NJ	26	---	ug/l	NJ								
Cyclononasiloxane, octadecamethyl- - TIC	556-71-8																					
Hexachlorobutadiene	87-68-3		ND	1.0	ug/l	UJ																
Hexadecanoic acid, butyl ester - TIC	111-06-8																					
Unknown - TIC	Tic1						7.7	---	ug/l	NJ	35	---	ug/l	NJ								
Unknown - TIC	Tic2										15	---	ug/l	NJ								
OSW-8270DSIM																						
1,4-Dioxane	123-91-1		0.28	0.20	ug/l	B					82	0.40	ug/l	J	0.45	0.20	ug/l	B				
Metals																						
OSW-6020B																						
Antimony - Dissolved	7440-36-0																					
Barium	7440-39-3																					
Barium - Dissolved	7440-39-3																					
Lead	7439-92-1		0.41	1.2	ug/l	UB																

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	RW-5-082418				RW-6-082318				RW-6A-082318				CMS-50-082318				OB-30C-082318			
		Lab Sample ID:	46016330224				4601633023				4601633024				4601633025				4601633026			
		Sample Date:	8/24/2018				8/23/2018				8/23/2018				8/23/2018				8/23/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																						
	OSW-8260C																					
	1,4-Dioxane - TIC	123-91-1																				
	1-Pentene, 2-methyl- - TIC	763-29-1																				
	1-Phenyl-1-butene - TIC	824-90-8																				
	2,3-Dihydroindene - TIC	496-11-7																				
	Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7																				
	Benzene, 1-ethenyl-4-ethyl- - TIC	3454-07-7																				
	Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4																				
	Cyclopentane, methyl- - TIC	96-37-7																				
	Ethyl ether - TIC	60-29-7																				
	Hexane - TIC	110-54-3																				
	Indane - TIC	496-11-7																				
	Methylene Chloride	75-09-2																				
	N-Propylbenzene - TIC	103-65-1																				
	Naphthalene - TIC	91-20-3																				
	p-Diethylbenzene - TIC	105-05-5																				
	Tetrahydrofuran - TIC	109-99-9																				
GC/MS SVOC																						
	OSW-8270D																					
	2(3H)-Benzothiazolone - TIC	934-34-9																				
	2-Methylphenol	95-48-7													ND	10	ug/l	UJ				
	3-Nitroaniline	99-09-2																				
	Benzene, (1-methylethyl)- - TIC	98-82-8																				
	Benzene, chloro- - TIC	108-90-7																				
	Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8									6.9	---	ug/l	NJ								
	Caprolactam	105-60-2																				
	Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7																				
	Cyclononasiloxane, octadecamethyl- - TIC	556-71-8																				
	Hexachlorobutadiene	87-68-3					ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	Hexadecanoic acid, butyl ester - TIC	111-06-8																				
	Unknown - TIC	Tic1																				
	Unknown - TIC	Tic2																				
	OSW-8270DSIM																					
	1,4-Dioxane	123-91-1													0.34	0.20	ug/l	B	0.31	0.20	ug/l	B
Metals																						
	OSW-6020B																					
	Antimony - Dissolved	7440-36-0													ND	2.0	ug/l	UJ				
	Barium	7440-39-3	7.8	4.0	ug/l	B																
	Barium - Dissolved	7440-39-3	7.1	4.0	ug/l	B									47.5	4.0	ug/l	J				
	Lead	7439-92-1																	0.46	1.2	ug/l	UB

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	CMS-100-082318				CMS-160-082318				CMS-275-082318			
		Lab Sample ID:	4601633027				4601633028				4601633029			
		Sample Date:	8/23/2018				8/23/2018				8/23/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,4-Dioxane - TIC	123-91-1												
1-Pentene, 2-methyl- - TIC	763-29-1												
1-Phenyl-1-butene - TIC	824-90-8												
2,3-Dihydroindene - TIC	496-11-7												
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7												
Benzene, 1-ethenyl-4-ethyl- - TIC	3454-07-7												
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4												
Cyclopentane, methyl- - TIC	96-37-7												
Ethyl ether - TIC	60-29-7												
Hexane - TIC	110-54-3												
Indane - TIC	496-11-7												
Methylene Chloride	75-09-2												
N-Propylbenzene - TIC	103-65-1												
Naphthalene - TIC	91-20-3												
p-Diethylbenzene - TIC	105-05-5												
Tetrahydrofuran - TIC	109-99-9												
GC/MS SVOC													
OSW-8270D													
2(3H)-Benzothiazolone - TIC	934-34-9												
2-Methylphenol	95-48-7												
3-Nitroaniline	99-09-2												
Benzene, (1-methylethyl)- - TIC	98-82-8												
Benzene, chloro- - TIC	108-90-7												
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8												
Caprolactam	105-60-2												
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
Cyclononasiloxane, octadecamethyl- - TIC	556-71-8												
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Hexadecanoic acid, butyl ester - TIC	111-06-8												
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
OSW-8270DSIM													
1,4-Dioxane	123-91-1	0.34	0.20	ug/l	B	0.33	0.20	ug/l	B	0.40	0.20	ug/l	B
Metals													
OSW-6020B													
Antimony - Dissolved	7440-36-0												
Barium	7440-39-3												
Barium - Dissolved	7440-39-3												
Lead	7439-92-1	0.44	1.2	ug/l	UB	3.4	1.2	ug/l	B				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	OB-20B-082318				SC-02-082318				OB-5-082318			
		Lab Sample ID:	4601633021				46016330210				46016330211			
		Sample Date:	8/23/2018				8/23/2018				8/23/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dioxane - TIC	123-91-1												
1-Pentene, 2-methyl- - TIC	763-29-1												
1-Phenyl-1-butene - TIC	824-90-8												
2,3-Dihydroindene - TIC	496-11-7												
2-Butanone (MEK)	78-93-3					ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6					ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1					ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1					6.1	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7												
Benzene, 1-ethenyl-4-ethyl- - TIC	3454-07-7												
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4												
Bromoform	75-25-2					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0					0.29	1.0	ug/l	J	0.22	1.0	ug/l	J
Carbon tetrachloride	56-23-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2					ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7												
Dichlorobromomethane	75-27-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7												
Ethylbenzene	100-41-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3												
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9					ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2					ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Propylbenzene - TIC	103-65-1												
Naphthalene - TIC	91-20-3												
p-Diethylbenzene - TIC	105-05-5												
Styrene	100-42-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9												
Toluene	108-88-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7					ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4					ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8					ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4					ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	OB-20B-082318				SC-02-082318				OB-5-082318			
		Lab Sample ID:	4601633021				46016330210				46016330211			
		Sample Date:	8/23/2018				8/23/2018				8/23/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270D													
1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2(3H)-Benzothiazolone - TIC	934-34-9												
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	UJ
2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzene, (1-methylethyl)- - TIC	98-82-8												
Benzene, chloro- - TIC	108-90-7												
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8												
Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	UJ
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
Cyclononasiloxane, octadecamethyl- - TIC	556-71-8									6.5	---	ug/l	NJ
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	---
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8					11	---	ug/l	NJ				
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene	91-20-3	1.1	10	ug/l	J	ND	10	ug/l	---	ND	10	ug/l	---
Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
OSW-8270DSIM													
1,4-Dioxane	123-91-1	0.59	0.20	ug/l	B	0.29	0.20	ug/l	B	0.32	0.20	ug/l	B
Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	OB-20B-082318				SC-02-082318				OB-5-082318			
		Lab Sample ID:	4601633021				46016330210				46016330211			
		Sample Date:	8/23/2018				8/23/2018				8/23/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other													
OSW-8082A													
PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals													
OSW-6020B													
Aluminum	7429-90-5	26.1	40.0	ug/l	J	219	40.0	ug/l	---	ND	40.0	ug/l	---
Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
Antimony	7440-36-0	ND	2.0	ug/l	---	2.2	2.0	ug/l	---	ND	2.0	ug/l	---
Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic	7440-38-2	1.1	2.0	ug/l	J	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Barium	7440-39-3	62.2	4.0	ug/l	---	61.0	4.0	ug/l	---	26.1	4.0	ug/l	---
Barium - Dissolved	7440-39-3	36.5	4.0	ug/l	---	47.1	4.0	ug/l	---	19.3	4.0	ug/l	---
Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Calcium	7440-70-2	40400	200	ug/l	---	75400	200	ug/l	---	64900	200	ug/l	---
Calcium - Dissolved	7440-70-2	37600	200	ug/l	---	64300	200	ug/l	---	61300	200	ug/l	---
Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Cobalt	7440-48-4	21.5	4.0	ug/l	---	2.8	4.0	ug/l	J	6.8	4.0	ug/l	---
Cobalt - Dissolved	7440-48-4	18.4	4.0	ug/l	---	ND	4.0	ug/l	---	4.4	4.0	ug/l	---
Copper	7440-50-8	4.2	4.0	ug/l	---	23.9	4.0	ug/l	---	3.8	4.0	ug/l	J
Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	11.0	4.0	ug/l	---	ND	4.0	ug/l	---
Iron	7439-89-6	31500	120	ug/l	---	852	120	ug/l	---	12200	120	ug/l	---
Iron - Dissolved	7439-89-6	3840	120	ug/l	---	ND	120	ug/l	---	893	120	ug/l	---
Lead	7439-92-1	0.43	1.2	ug/l	UB	4.0	1.2	ug/l	---	ND	1.2	ug/l	---
Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
Magnesium	7439-95-4	8210	200	ug/l	---	18700	200	ug/l	---	32400	200	ug/l	---
Magnesium - Dissolved	7439-95-4	6760	200	ug/l	---	14100	200	ug/l	---	27300	200	ug/l	---
Manganese	7439-96-5	5820	8.0	ug/l	---	50.2	8.0	ug/l	---	2010	8.0	ug/l	---
Manganese - Dissolved	7439-96-5	5660	8.0	ug/l	---	ND	8.0	ug/l	---	1810	8.0	ug/l	---
Nickel	7440-02-0	4.2	4.0	ug/l	---	5.5	4.0	ug/l	---	2.4	4.0	ug/l	J
Nickel - Dissolved	7440-02-0	3.4	4.0	ug/l	J	4.2	4.0	ug/l	---	1.6	4.0	ug/l	J
Potassium	7440-09-7	2430	200	ug/l	---	5210	200	ug/l	---	3400	200	ug/l	---
Potassium - Dissolved	7440-09-7	2230	200	ug/l	---	4360	200	ug/l	---	3170	200	ug/l	---
Selenium	7782-49-2	ND	10.0	ug/l	---	0.83	10.0	ug/l	J	ND	10.0	ug/l	---
Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Sodium	7440-23-5	4320	200	ug/l	---	8460	200	ug/l	---	35100	200	ug/l	---
Sodium - Dissolved	7440-23-5	3320	200	ug/l	---	6360	200	ug/l	---	28900	200	ug/l	---
Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Zinc	7440-66-6	ND	16.0	ug/l	---	110	16.0	ug/l	---	ND	16.0	ug/l	---
Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	78.0	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A													
Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry													
OSW-9012B													
Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A													
Chloride	16887-00-6	2.19	0.12	mg/l	---	2.83	0.12	mg/l	---	80.1	3.00	mg/l	---
Sulfate	14808-79-8	ND	0.60	mg/l	---	37.7	3.00	mg/l	---	15.2	0.60	mg/l	---
Prep													
APHA-2320B													
Alkalinity	E-14506	196	5.0	mg/l	---	255	5.0	mg/l	---	271	5.0	mg/l	---
Bicarbonate Alkalinity as CaCO3	E-14508	196	5.0	mg/l	---	255	5.0	mg/l	---	271	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	Dup-02-082318				OB-12-082318				OB-2-082318			
		Lab Sample ID:	46016330212				46016330213				46016330214			
		Sample Date:	8/23/2018				8/23/2018				8/23/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dioxane - TIC	123-91-1												
1-Pentene, 2-methyl- - TIC	763-29-1												
1-Phenyl-1-butene - TIC	824-90-8												
2,3-Dihydroindene - TIC	496-11-7												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	11	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7												
Benzene, 1-ethenyl-4-ethyl- - TIC	3454-07-7												
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4												
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7												
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7												
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3												
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	0.37	1.0	ug/l	UB	ND	1.0	ug/l	---
N-Propylbenzene - TIC	103-65-1												
Naphthalene - TIC	91-20-3												
p-Diethylbenzene - TIC	105-05-5												
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9												
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	Dup-02-082318				OB-12-082318				OB-2-082318			
		Lab Sample ID:	46016330212				46016330213				46016330214			
		Sample Date:	8/23/2018				8/23/2018				8/23/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270D													
1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2(3H)-Benzothiazolone - TIC	934-34-9												
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzene, (1-methylethyl)- - TIC	98-82-8												
Benzene, chloro- - TIC	108-90-7												
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8												
Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
Cyclononasiloxane, octadecamethyl- - TIC	556-71-8												
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8												
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
OSW-8270DSIM													
1,4-Dioxane	123-91-1	0.25	0.20	ug/l	B	0.28	0.20	ug/l	B	0.25	0.20	ug/l	B
Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

			Sample Name:	Dup-02-082318				OB-12-082318				OB-2-082318			
			Lab Sample ID:	46016330212				46016330213				46016330214			
			Sample Date:	8/23/2018				8/23/2018				8/23/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals														
	OSW-6020B													
	Aluminum	7429-90-5	17.7	40.0	ug/l	J	32.5	40.0	ug/l	J	80.6	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	ND	2.0	ug/l	---	0.67	2.0	ug/l	J	0.63	2.0	ug/l	J
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	2.3	4.0	ug/l	UB	2.3	4.0	ug/l	UB	5.1	4.0	ug/l	B
	Barium - Dissolved	7440-39-3	1.5	4.0	ug/l	UB	1.6	4.0	ug/l	UB	4.4	4.0	ug/l	B
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	6590	200	ug/l	---	6320	200	ug/l	---	11600	200	ug/l	---
	Calcium - Dissolved	7440-70-2	5740	200	ug/l	---	5470	200	ug/l	---	10500	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	9.4	4.0	ug/l	---	4.4	4.0	ug/l	---	7.4	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---	231	120	ug/l	---
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	2680	200	ug/l	---	2670	200	ug/l	---	4550	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	2060	200	ug/l	---	1990	200	ug/l	---	3500	200	ug/l	---
	Manganese	7439-96-5	ND	8.0	ug/l	---	ND	8.0	ug/l	---	8.3	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	ND	8.0	ug/l	---	ND	8.0	ug/l	---	ND	8.0	ug/l	---
	Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	583	200	ug/l	---	549	200	ug/l	---	1320	200	ug/l	---
	Potassium - Dissolved	7440-09-7	499	200	ug/l	---	472	200	ug/l	---	1180	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	2780	200	ug/l	---	2710	200	ug/l	---	3840	200	ug/l	---
	Sodium - Dissolved	7440-23-5	1950	200	ug/l	---	1880	200	ug/l	---	2740	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	1.11	0.12	mg/l	---	1.19	0.12	mg/l	---	1.72	0.12	mg/l	---
	Sulfate	14808-79-8	10.7	0.60	mg/l	---	10.7	0.60	mg/l	---	11.3	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	21.6	5.0	mg/l	---	21.9	5.0	mg/l	---	37.8	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	21.6	5.0	mg/l	---	21.9	5.0	mg/l	---	37.8	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	TB-03-082418				RW-13 (71-91)-082418				OB-30A-082418			
		Lab Sample ID:	46016330215				46016330216				46016330217			
		Sample Date:	8/24/2018				8/24/2018				8/24/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dioxane - TIC	123-91-1												
1-Pentene, 2-methyl- - TIC	763-29-1												
1-Phenyl-1-butene - TIC	824-90-8												
2,3-Dihydroindene - TIC	496-11-7												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7												
Benzene, 1-ethenyl-4-ethyl- - TIC	3454-07-7												
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4												
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7												
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7												
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3												
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	0.36	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Propylbenzene - TIC	103-65-1												
Naphthalene - TIC	91-20-3												
p-Diethylbenzene - TIC	105-05-5												
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9												
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	TB-03-082418				RW-13 (71-91)-082418				OB-30A-082418			
		Lab Sample ID:	46016330215				46016330216				46016330217			
		Sample Date:	8/24/2018				8/24/2018				8/24/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270D													
1,1'-Biphenyl	92-52-4					ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3					ND	10	ug/l	---	ND	10	ug/l	---
2(3H)-Benzothiazolone - TIC	934-34-9												
2,2'-oxybis[1-chloropropane]	108-60-1					ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2					ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4					ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2					ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2					ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9					ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5					ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2					ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2					ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7					ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8					ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6					ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7					ND	10	ug/l	UJ	ND	10	ug/l	UJ
2-Nitroaniline	88-74-4					ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5					ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1					ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2					ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1					ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3					ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7					ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8					ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3					ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5					ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6					ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7					ND	20	ug/l	---	ND	20	ug/l	---
Acenaphthene	83-32-9					ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8					ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2					ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7					ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9					ND	2.0	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde	100-52-7					ND	10	ug/l	---	ND	10	ug/l	---
Benzene, (1-methylethyl)- - TIC	98-82-8												
Benzene, chloro- - TIC	108-90-7												
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8												
Benzo[g,h,i]perylene	191-24-2					ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1					ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7					ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7					ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2					ND	10	ug/l	UJ	ND	10	ug/l	UJ
Carbazole	86-74-8					ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9					ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
Cyclononasiloxane, octadecamethyl- - TIC	556-71-8												
Di-n-butyl phthalate	84-74-2					ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0					ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9					ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2					ND	10	ug/l	---	ND	10	ug/l	---
Dimethyl phthalate	131-11-3					ND	10	ug/l	---	ND	10	ug/l	---
Fluoranthene	206-44-0					ND	10	ug/l	---	ND	10	ug/l	---
Fluorene	86-73-7					ND	10	ug/l	---	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexachlorocyclopentadiene	77-47-4					ND	10	ug/l	---	ND	10	ug/l	---
Hexachloroethane	67-72-1					ND	2.0	ug/l	---	ND	2.0	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8												
Isophorone	78-59-1					ND	10	ug/l	---	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7					ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6					ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene	91-20-3					ND	10	ug/l	---	ND	10	ug/l	---
Nitrobenzene	98-95-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Phenanthrene	85-01-8					ND	10	ug/l	---	ND	10	ug/l	---
Phenol	108-95-2					ND	10	ug/l	---	ND	10	ug/l	---
Pyrene	129-00-0					ND	10	ug/l	---	ND	10	ug/l	---
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
OSW-8270DSIM													
1,4-Dioxane	123-91-1					0.50	0.20	ug/l	B	0.34	0.20	ug/l	B
Benzo[a]anthracene	56-55-3					ND	0.050	ug/l	---	ND	0.050	ug/l	---
Benzo[a]pyrene	50-32-8					ND	0.050	ug/l	---	ND	0.050	ug/l	---
Benzo[b]fluoranthene	205-99-2					ND	0.050	ug/l	---	ND	0.050	ug/l	---
Bis(2-chloroethyl)ether	111-44-4					ND	0.030	ug/l	---	0.031	0.030	ug/l	---
Dibenz(a,h)anthracene	53-70-3					ND	0.050	ug/l	---	ND	0.050	ug/l	---
Hexachlorobenzene	118-74-1					ND	0.020	ug/l	---	0.027	0.020	ug/l	---
Indeno[1,2,3-cd]pyrene	193-39-5					ND	0.050	ug/l	---	ND	0.050	ug/l	---
N-Nitrosodimethylamine	62-75-9					ND	0.20	ug/l	---	ND	0.20	ug/l	---
Pentachlorophenol	87-86-5					ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	TB-03-082418				RW-13 (71-91)-082418				OB-30A-082418			
		Lab Sample ID:	46016330215				46016330216				46016330217			
		Sample Date:	8/24/2018				8/24/2018				8/24/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4					ND	0.40	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3					ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals														
	OSW-6020B													
	Aluminum	7429-90-5					94.0	40.0	ug/l	---	52.2	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5					ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0					0.62	2.0	ug/l	J	1.3	2.0	ug/l	J
	Antimony - Dissolved	7440-36-0					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3					13.5	4.0	ug/l	---	31.7	4.0	ug/l	---
	Barium - Dissolved	7440-39-3					11.1	4.0	ug/l	---	24.2	4.0	ug/l	---
	Beryllium	7440-41-7					ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7					ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2					44600	200	ug/l	---	20600	200	ug/l	---
	Calcium - Dissolved	7440-70-2					39300	200	ug/l	---	17300	200	ug/l	---
	Chromium	7440-47-3					1.5	4.0	ug/l	J	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8					4.4	4.0	ug/l	---	6.5	4.0	ug/l	---
	Copper - Dissolved	7440-50-8					ND	4.0	ug/l	---	2.5	4.0	ug/l	J
	Iron	7439-89-6					209	120	ug/l	---	694	120	ug/l	---
	Iron - Dissolved	7439-89-6					ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1					ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1					ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4					17000	200	ug/l	---	4730	200	ug/l	---
	Magnesium - Dissolved	7439-95-4					13300	200	ug/l	---	3490	200	ug/l	---
	Manganese	7439-96-5					16.0	8.0	ug/l	---	6.5	8.0	ug/l	J
	Manganese - Dissolved	7439-96-5					10	8.0	ug/l	---	ND	8.0	ug/l	---
	Nickel	7440-02-0					1.4	4.0	ug/l	J	2.0	4.0	ug/l	J
	Nickel - Dissolved	7440-02-0					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7					3270	200	ug/l	---	3440	200	ug/l	---
	Potassium - Dissolved	7440-09-7					2800	200	ug/l	---	2870	200	ug/l	---
	Selenium	7782-49-2					ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2					ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4					ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5					17000	200	ug/l	---	26100	200	ug/l	---
	Sodium - Dissolved	7440-23-5					12900	200	ug/l	---	18700	200	ug/l	---
	Thallium	7440-28-0					ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0					ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2					ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6					ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6					ND	16.0	ug/l	---	ND	16.0	ug/l	---
	OSW-7470A													
	Mercury	7439-97-6					ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6					ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5					ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6					40.6	2.40	mg/l	---	21.6	1.20	mg/l	---
	Sulfate	14808-79-8					19.3	0.60	mg/l	---	12.8	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506					129	5.0	mg/l	---	77.5	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508					129	5.0	mg/l	---	77.5	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	Dup-03-082418				PMS-50-082418				OB-20A-082318			
		Lab Sample ID:	46016330218				46016330219				4601633022			
		Sample Date:	8/24/2018				8/24/2018				8/23/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dioxane - TIC	123-91-1												
1-Pentene, 2-methyl- - TIC	763-29-1												
1-Phenyl-1-butene - TIC	824-90-8												
2,3-Dihydroindene - TIC	496-11-7												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7												
Benzene, 1-ethenyl-4-ethyl- - TIC	3454-07-7												
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4												
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	0.51	1.0	ug/l	J	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7												
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7												
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3												
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Propylbenzene - TIC	103-65-1												
Naphthalene - TIC	91-20-3												
p-Diethylbenzene - TIC	105-05-5												
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9												
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	Dup-03-082418				PMS-50-082418				OB-20A-082318			
		Lab Sample ID:	46016330218				46016330219				4601633022			
		Sample Date:	8/24/2018				8/24/2018				8/23/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270D													
1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2(3H)-Benzothiazolone - TIC	934-34-9												
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	---
2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzene, (1-methylethyl)- - TIC	98-82-8												
Benzene, chloro- - TIC	108-90-7												
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8												
Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	---
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
Cyclononasiloxane, octadecamethyl- - TIC	556-71-8												
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	UJ
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8												
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
OSW-8270DSIM													
1,4-Dioxane	123-91-1	0.45	0.20	ug/l	B	0.41	0.20	ug/l	B	0.28	0.20	ug/l	B
Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

			Sample Name:	Dup-03-082418				PMS-50-082418				OB-20A-082318			
			Lab Sample ID:	46016330218				46016330219				4601633022			
			Sample Date:	8/24/2018				8/24/2018				8/23/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals														
	OSW-6020B													
	Aluminum	7429-90-5	92.7	40.0	ug/l	---	120	40.0	ug/l	---	46.0	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	15.4	40.0	ug/l	J	ND	40.0	ug/l	---
	Antimony	7440-36-0	0.67	2.0	ug/l	J	0.63	2.0	ug/l	J	0.75	2.0	ug/l	J
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	0.77	2.0	ug/l	J
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	13.6	4.0	ug/l	---	14.0	4.0	ug/l	---	132	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	9.6	4.0	ug/l	---	10.6	4.0	ug/l	---	97.1	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	43700	200	ug/l	---	5680	200	ug/l	---	19400	200	ug/l	---
	Calcium - Dissolved	7440-70-2	39100	200	ug/l	---	5020	200	ug/l	---	17600	200	ug/l	---
	Chromium	7440-47-3	1.6	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	9.9	4.0	ug/l	---	4.0	4.0	ug/l	---	3.1	4.0	ug/l	J
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	202	120	ug/l	---	615	120	ug/l	---	19900	120	ug/l	---
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	78.0	120	ug/l	J	ND	120	ug/l	---
	Lead	7439-92-1	ND	1.2	ug/l	---	1.7	1.2	ug/l	---	0.41	1.2	ug/l	UB
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	16900	200	ug/l	---	1640	200	ug/l	---	2490	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	13200	200	ug/l	---	1260	200	ug/l	---	1980	200	ug/l	---
	Manganese	7439-96-5	15.9	8.0	ug/l	---	15.3	8.0	ug/l	---	352	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	9.5	8.0	ug/l	---	9.9	8.0	ug/l	---	311	8.0	ug/l	---
	Nickel	7440-02-0	1.5	4.0	ug/l	J	ND	4.0	ug/l	---	1.9	4.0	ug/l	J
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	1.3	4.0	ug/l	J
	Potassium	7440-09-7	3290	200	ug/l	---	530	200	ug/l	---	2090	200	ug/l	---
	Potassium - Dissolved	7440-09-7	2820	200	ug/l	---	444	200	ug/l	---	1860	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	16900	200	ug/l	---	2840	200	ug/l	---	3750	200	ug/l	---
	Sodium - Dissolved	7440-23-5	12700	200	ug/l	---	2030	200	ug/l	---	2800	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	1.3	4.0	ug/l	J	ND	4.0	ug/l	---	1.4	4.0	ug/l	J
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	1020	16.0	ug/l	---	11.6	16.0	ug/l	J
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	907	16.0	ug/l	---	ND	16.0	ug/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	38.5	2.40	mg/l	---	1.71	0.12	mg/l	---	2.45	0.12	mg/l	---
	Sulfate	14808-79-8	19.2	0.60	mg/l	---	3.70	0.60	mg/l	---	1.65	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	129	5.0	mg/l	---	21.4	5.0	mg/l	---	96.1	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	129	5.0	mg/l	---	21.4	5.0	mg/l	---	96.1	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	PMS-180-082418				PMS-230-082418				SC-01-082418			
		Lab Sample ID:	46016330220				46016330221				46016330222			
		Sample Date:	8/24/2018				8/24/2018				8/24/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,1-Dichloroethane	75-34-3	0.44	1.0	ug/l	J	ND	1.0	ug/l	---				
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	0.90	1.0	ug/l	J				
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,3-Dichlorobenzene	541-73-1	0.34	1.0	ug/l	J	3.2	1.0	ug/l	---				
1,4-Dichlorobenzene	106-46-7	1.5	1.0	ug/l	---	8.4	1.0	ug/l	---				
1,4-Dioxane - TIC	123-91-1					90	50	ug/l	NJ				
1-Pentene, 2-methyl- - TIC	763-29-1	6.3	---	ug/l	NJ								
1-Phenyl-1-butene - TIC	824-90-8	11	---	ug/l	NJ								
2,3-Dihydroindene - TIC	496-11-7					6.0	1.0	ug/l	NJ				
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---				
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---				
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---				
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---				
Benzene	71-43-2	10	1.0	ug/l	---	33	1.0	ug/l	---				
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7					6.8	---	ug/l	NJ				
Benzene, 1-ethenyl-4-ethyl- - TIC	3454-07-7					16	---	ug/l	NJ				
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4					7.0	---	ug/l	NJ				
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Chlorobenzene	108-90-7	3.1	1.0	ug/l	---	21	1.0	ug/l	---				
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Chloroethane	75-00-3	23	1.0	ug/l	---	8.6	1.0	ug/l	---				
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Cyclohexane	110-82-7	1.4	1.0	ug/l	---	2.9	1.0	ug/l	---				
Cyclopentane, methyl- - TIC	96-37-7					14	---	ug/l	NJ				
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Ethyl ether - TIC	60-29-7					1.4	1.0	ug/l	NJ				
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Hexane - TIC	110-54-3					0.75	1.0	ug/l	NJ				
Indane - TIC	496-11-7	11	---	ug/l	NJ								
Isopropylbenzene	98-82-8	1.8	1.0	ug/l	---	14	1.0	ug/l	---				
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---				
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Methylcyclohexane	108-87-2	0.36	1.0	ug/l	J	0.68	1.0	ug/l	J				
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
N-Propylbenzene - TIC	103-65-1					1.7	1.0	ug/l	NJ				
Naphthalene - TIC	91-20-3					9.8	1.0	ug/l	NJ				
p-Diethylbenzene - TIC	105-05-5					0.50	1.0	ug/l	NJ				
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Tetrahydrofuran - TIC	109-99-9					4.3	2.0	ug/l	NJ				
Toluene	108-88-3	0.81	1.0	ug/l	J	0.43	1.0	ug/l	J				
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	1.1	2.0	ug/l	J				
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---				
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---				
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	PMS-180-082418				PMS-230-082418				SC-01-082418			
		Lab Sample ID:	46016330220				46016330221				46016330222			
		Sample Date:	8/24/2018				8/24/2018				8/24/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270D													
1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2(3H)-Benzothiazolone - TIC	934-34-9					7.0	---	ug/l	NJ				
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	UJ	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzene, (1-methylethyl)- - TIC	98-82-8					8.8	---	ug/l	NJ				
Benzene, chloro- - TIC	108-90-7					9.1	---	ug/l	NJ				
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8	6.5	---	ug/l	NJ	11	---	ug/l	NJ	7.2	---	ug/l	NJ
Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	UJ	ND	10	ug/l	---	ND	10	ug/l	UJ
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7	12	---	ug/l	NJ	26	---	ug/l	NJ				
Cyclononasiloxane, octadecamethyl- - TIC	556-71-8												
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8												
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	1.1	10	ug/l	J
Naphthalene	91-20-3	1.4	10	ug/l	J	5.0	10	ug/l	J	4.5	10	ug/l	J
Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Unknown - TIC	Tic1	7.7	---	ug/l	NJ	35	---	ug/l	NJ				
Unknown - TIC	Tic2					15	---	ug/l	NJ				
OSW-8270DSIM													
1,4-Dioxane	123-91-1	21	0.20	ug/l	---	82	0.40	ug/l	J	0.45	0.20	ug/l	B
Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.051	ug/l	---	0.027	0.050	ug/l	J
Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.051	ug/l	---	ND	0.050	ug/l	---
Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.051	ug/l	---	ND	0.050	ug/l	---
Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.031	ug/l	---	ND	0.030	ug/l	---
Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.051	ug/l	---	ND	0.050	ug/l	---
Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.051	ug/l	---	ND	0.050	ug/l	---
N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

Analyte	Cas No.	Sample Name: PMS-180-082418 Lab Sample ID: 46016330220 Sample Date: 8/24/2018 Result	Report Limit	Units	Valid Qualifier	Sample Name: PMS-230-082418 Lab Sample ID: 46016330221 Sample Date: 8/24/2018 Result	Report Limit	Units	Valid Qualifier	Sample Name: SC-01-082418 Lab Sample ID: 46016330222 Sample Date: 8/24/2018 Result	Report Limit	Units	Valid Qualifier
GC Other													
OSW-8082A													
PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals													
OSW-6020B													
Aluminum	7429-90-5	51.2	40.0	ug/l	---	41.4	40.0	ug/l	---	57.7	40.0	ug/l	---
Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
Antimony	7440-36-0	0.69	2.0	ug/l	J	0.80	2.0	ug/l	J	0.72	2.0	ug/l	J
Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic	7440-38-2	ND	2.0	ug/l	---	4.1	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Barium	7440-39-3	548	4.0	ug/l	---	499	4.0	ug/l	---	361	4.0	ug/l	---
Barium - Dissolved	7440-39-3	261	4.0	ug/l	---	126	4.0	ug/l	---	291	4.0	ug/l	---
Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Calcium	7440-70-2	71700	200	ug/l	---	96000	200	ug/l	---	25600	200	ug/l	---
Calcium - Dissolved	7440-70-2	58200	200	ug/l	---	91500	200	ug/l	---	24400	200	ug/l	---
Chromium	7440-47-3	5.0	4.0	ug/l	---	9.0	4.0	ug/l	---	7.3	4.0	ug/l	---
Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Cobalt	7440-48-4	ND	4.0	ug/l	---	2.4	4.0	ug/l	J	2.6	4.0	ug/l	J
Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	2.1	4.0	ug/l	J
Copper	7440-50-8	8.6	4.0	ug/l	---	13.2	4.0	ug/l	---	3.1	4.0	ug/l	J
Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Iron	7439-89-6	128000	120	ug/l	---	134000	120	ug/l	---	54600	120	ug/l	---
Iron - Dissolved	7439-89-6	17600	120	ug/l	---	5710	120	ug/l	---	5970	120	ug/l	---
Lead	7439-92-1	25.2	1.2	ug/l	---	54.5	1.2	ug/l	---	5.7	1.2	ug/l	---
Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
Magnesium	7439-95-4	7030	200	ug/l	---	11600	200	ug/l	---	3560	200	ug/l	---
Magnesium - Dissolved	7439-95-4	5110	200	ug/l	---	11900	200	ug/l	---	3360	200	ug/l	---
Manganese	7439-96-5	1370	8.0	ug/l	---	1990	8.0	ug/l	---	458	8.0	ug/l	---
Manganese - Dissolved	7439-96-5	1050	8.0	ug/l	---	1890	8.0	ug/l	---	434	8.0	ug/l	---
Nickel	7440-02-0	ND	4.0	ug/l	---	4.8	4.0	ug/l	---	11.3	4.0	ug/l	---
Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	2.6	4.0	ug/l	J	9.0	4.0	ug/l	---
Potassium	7440-09-7	3310	200	ug/l	---	7700	200	ug/l	---	1970	200	ug/l	---
Potassium - Dissolved	7440-09-7	2760	200	ug/l	---	8030	200	ug/l	---	1900	200	ug/l	---
Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Sodium	7440-23-5	9510	200	ug/l	---	30200	200	ug/l	---	3670	200	ug/l	---
Sodium - Dissolved	7440-23-5	6420	200	ug/l	---	29500	200	ug/l	---	2980	200	ug/l	---
Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Vanadium	7440-62-2	8.9	4.0	ug/l	---	4.0	4.0	ug/l	---	3.2	4.0	ug/l	J
Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Zinc	7440-66-6	3290	160	ug/l	---	669	16.0	ug/l	---	56.1	16.0	ug/l	---
Zinc - Dissolved	7440-66-6	241	16.0	ug/l	---	91.2	16.0	ug/l	---	44.5	16.0	ug/l	---
OSW-7470A													
Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry													
OSW-9012B													
Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A													
Chloride	16887-00-6	3.77	0.12	mg/l	---	10.3	0.48	mg/l	---	1.97	0.12	mg/l	---
Sulfate	14808-79-8	0.63	0.60	mg/l	---	ND	0.60	mg/l	---	0.62	0.60	mg/l	---
Prep													
APHA-2320B													
Alkalinity	E-14506	351	5.0	mg/l	---	565	5.0	mg/l	---	152	5.0	mg/l	---
Bicarbonate Alkalinity as CaCO3	E-14508	351	5.0	mg/l	---	565	5.0	mg/l	---	152	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	FB-03-082418				RW-5-082418				RW-6-082318			
		Lab Sample ID:	46016330223				46016330224				4601633023			
		Sample Date:	8/24/2018				8/24/2018				8/23/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
1,4-Dioxane - TIC	123-91-1												
1-Pentene, 2-methyl- - TIC	763-29-1												
1-Phenyl-1-butene - TIC	824-90-8												
2,3-Dihydroindene - TIC	496-11-7												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---				
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---				
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---				
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---				
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7												
Benzene, 1-ethenyl-4-ethyl- - TIC	3454-07-7												
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4												
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Chloroethane	75-00-3	ND	1.0	ug/l	---	1.2	1.0	ug/l	---				
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Cyclopentane, methyl- - TIC	96-37-7												
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Ethyl ether - TIC	60-29-7												
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Hexane - TIC	110-54-3												
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---				
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Methylene Chloride	75-09-2	1.8	1.0	ug/l	---	ND	1.0	ug/l	---				
N-Propylbenzene - TIC	103-65-1												
Naphthalene - TIC	91-20-3												
p-Diethylbenzene - TIC	105-05-5												
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Tetrahydrofuran - TIC	109-99-9												
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---				
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---				
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	FB-03-082418				RW-5-082418				RW-6-082318			
		Lab Sample ID:	46016330223				46016330224				4601633023			
		Sample Date:	8/24/2018				8/24/2018				8/23/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270D													
1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2(3H)-Benzothiazolone - TIC	934-34-9												
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	21	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	21	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	21	ug/l	---	ND	20	ug/l	---
Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzene, (1-methylethyl)- - TIC	98-82-8												
Benzene, chloro- - TIC	108-90-7												
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8												
Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	UJ	ND	10	ug/l	---	ND	10	ug/l	---
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.0	ug/l	---
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
Cyclononasiloxane, octadecamethyl- - TIC	556-71-8												
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	UJ
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.1	ug/l	---	ND	2.0	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8												
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
OSW-8270DSIM													
1,4-Dioxane	123-91-1	0.26	0.20	ug/l	---	6.8	0.20	ug/l	---	2.1	0.20	ug/l	---
Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.052	ug/l	---	ND	0.050	ug/l	---
Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.052	ug/l	---	ND	0.050	ug/l	---
Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.052	ug/l	---	ND	0.050	ug/l	---
Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.031	ug/l	---	ND	0.030	ug/l	---
Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.052	ug/l	---	ND	0.050	ug/l	---
Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.021	ug/l	---	ND	0.020	ug/l	---
Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.052	ug/l	---	ND	0.050	ug/l	---
N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.21	ug/l	---	ND	0.20	ug/l	---
Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.21	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	FB-03-082418				RW-5-082418				RW-6-082318			
		Lab Sample ID:	46016330223				46016330224				4601633023			
		Sample Date:	8/24/2018				8/24/2018				8/23/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other													
OSW-8082A													
PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals													
OSW-6020B													
Aluminum	7429-90-5	ND	40.0	ug/l	---	1460	40.0	ug/l	---	18.1	40.0	ug/l	J
Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	296	40.0	ug/l	---	ND	40.0	ug/l	---
Antimony	7440-36-0	ND	2.0	ug/l	---	0.84	2.0	ug/l	J	0.69	2.0	ug/l	J
Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic	7440-38-2	ND	2.0	ug/l	---	14.3	2.0	ug/l	---	1.1	2.0	ug/l	J
Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	16.9	2.0	ug/l	---	ND	2.0	ug/l	---
Barium	7440-39-3	ND	4.0	ug/l	---	7.8	4.0	ug/l	B	350	4.0	ug/l	---
Barium - Dissolved	7440-39-3	1.9	4.0	ug/l	J	7.1	4.0	ug/l	B	228	4.0	ug/l	---
Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Calcium	7440-70-2	ND	200	ug/l	---	9560	200	ug/l	---	69200	200	ug/l	---
Calcium - Dissolved	7440-70-2	ND	200	ug/l	---	7520	200	ug/l	---	66900	200	ug/l	---
Chromium	7440-47-3	ND	4.0	ug/l	---	2.7	4.0	ug/l	J	ND	4.0	ug/l	---
Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	2.9	4.0	ug/l	J
Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	2.2	4.0	ug/l	J
Copper	7440-50-8	ND	4.0	ug/l	---	9.1	4.0	ug/l	---	4.1	4.0	ug/l	---
Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	4.4	4.0	ug/l	---	ND	4.0	ug/l	---
Iron	7439-89-6	ND	120	ug/l	---	1990	120	ug/l	---	41200	120	ug/l	---
Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---	4790	120	ug/l	---
Lead	7439-92-1	ND	1.2	ug/l	---	3.1	1.2	ug/l	---	ND	1.2	ug/l	---
Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
Magnesium	7439-95-4	ND	200	ug/l	---	915	200	ug/l	---	12200	200	ug/l	---
Magnesium - Dissolved	7439-95-4	ND	200	ug/l	---	ND	200	ug/l	---	10400	200	ug/l	---
Manganese	7439-96-5	ND	8.0	ug/l	---	71.2	8.0	ug/l	---	5370	8.0	ug/l	---
Manganese - Dissolved	7439-96-5	ND	8.0	ug/l	---	ND	8.0	ug/l	---	5370	8.0	ug/l	---
Nickel	7440-02-0	ND	4.0	ug/l	---	3.7	4.0	ug/l	J	1.3	4.0	ug/l	J
Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	2.9	4.0	ug/l	J	ND	4.0	ug/l	---
Potassium	7440-09-7	ND	200	ug/l	---	99100	200	ug/l	---	3000	200	ug/l	---
Potassium - Dissolved	7440-09-7	ND	200	ug/l	---	104000	200	ug/l	---	2840	200	ug/l	---
Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Sodium	7440-23-5	ND	200	ug/l	---	76100	200	ug/l	---	9310	200	ug/l	---
Sodium - Dissolved	7440-23-5	247	200	ug/l	---	71600	200	ug/l	---	7970	200	ug/l	---
Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Vanadium	7440-62-2	ND	4.0	ug/l	---	2.6	4.0	ug/l	J	ND	4.0	ug/l	---
Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	2.2	4.0	ug/l	J	ND	4.0	ug/l	---
Zinc	7440-66-6	ND	16.0	ug/l	---	63.2	16.0	ug/l	---	ND	16.0	ug/l	---
Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	44.9	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A													
Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry													
OSW-9012B													
Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A													
Chloride	16887-00-6	ND	0.12	mg/l	---	2.45	0.12	mg/l	---	7.50	0.60	mg/l	---
Sulfate	14808-79-8	ND	0.60	mg/l	---	22.7	0.60	mg/l	---	1.21	0.60	mg/l	---
Prep													
APHA-2320B													
Alkalinity	E-14506	ND	5.0	mg/l	---	288	5.0	mg/l	---	301	5.0	mg/l	---
Bicarbonate Alkalinity as CaCO3	E-14508	ND	5.0	mg/l	---	ND	5.0	mg/l	---	301	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	RW-6A-082318				CMS-50-082318				OB-30C-082318			
		Lab Sample ID:	4601633024				4601633025				4601633026			
		Sample Date:	8/23/2018				8/23/2018				8/23/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6									ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5									ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1									ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5									ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3									ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4									ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6									ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1									ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1									ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2									ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5									ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1									ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7									ND	1.0	ug/l	---
1,4-Dioxane - TIC	123-91-1												
1-Pentene, 2-methyl- - TIC	763-29-1												
1-Phenyl-1-butene - TIC	824-90-8												
2,3-Dihydroindene - TIC	496-11-7												
2-Butanone (MEK)	78-93-3									ND	5.0	ug/l	---
2-Hexanone	591-78-6									ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1									ND	5.0	ug/l	---
Acetone	67-64-1									ND	5.0	ug/l	---
Benzene	71-43-2									ND	1.0	ug/l	---
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7												
Benzene, 1-ethenyl-4-ethyl- - TIC	3454-07-7												
Benzene, 1-methyl-2-(1-methylethyl)- - TIC	527-84-4												
Bromoform	75-25-2									ND	1.0	ug/l	---
Bromomethane	74-83-9									ND	1.0	ug/l	---
Carbon disulfide	75-15-0									ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5									ND	1.0	ug/l	---
Chlorobenzene	108-90-7									ND	1.0	ug/l	---
Chlorobromomethane	74-97-5									ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1									ND	1.0	ug/l	---
Chloroethane	75-00-3									ND	1.0	ug/l	---
Chloroform	67-66-3									ND	1.0	ug/l	---
Chloromethane	74-87-3									ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2									ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5									ND	1.0	ug/l	---
Cyclohexane	110-82-7									ND	1.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7												
Dichlorobromomethane	75-27-4									ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8									ND	1.0	ug/l	---
Ethyl ether - TIC	60-29-7												
Ethylbenzene	100-41-4									ND	1.0	ug/l	---
Hexane - TIC	110-54-3												
Indane - TIC	496-11-7												
Isopropylbenzene	98-82-8									ND	1.0	ug/l	---
Methyl acetate	79-20-9									ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4									ND	1.0	ug/l	---
Methylcyclohexane	108-87-2									ND	1.0	ug/l	---
Methylene Chloride	75-09-2									ND	1.0	ug/l	---
N-Propylbenzene - TIC	103-65-1												
Naphthalene - TIC	91-20-3												
p-Diethylbenzene - TIC	105-05-5												
Styrene	100-42-5									ND	1.0	ug/l	---
Tetrachloroethene	127-18-4									ND	1.0	ug/l	---
Tetrahydrofuran - TIC	109-99-9												
Toluene	108-88-3									ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5									ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6									ND	1.0	ug/l	---
Trichloroethene	79-01-6									ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4									ND	1.0	ug/l	---
Vinyl chloride	75-01-4									ND	1.0	ug/l	---
Xylenes, Total	1330-20-7									ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4									ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8									ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4									ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	RW-6A-082318				CMS-50-082318				OB-30C-082318			
		Lab Sample ID:	4601633024				4601633025				4601633026			
		Sample Date:	8/23/2018				8/23/2018				8/23/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270D													
1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2(3H)-Benzothiazolone - TIC	934-34-9												
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	UJ	ND	10	ug/l	---
2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzene, (1-methylethyl)- - TIC	98-82-8												
Benzene, chloro- - TIC	108-90-7												
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8	6.9	---	ug/l	NJ								
Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
Cyclononasiloxane, octadecamethyl- - TIC	556-71-8												
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8												
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
OSW-8270DSIM													
1,4-Dioxane	123-91-1	3.1	0.20	ug/l	---	0.34	0.20	ug/l	B	0.31	0.20	ug/l	B
Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	RW-6A-082318				CMS-50-082318				OB-30C-082318			
		Lab Sample ID:	4601633024				4601633025				4601633026			
		Sample Date:	8/23/2018				8/23/2018				8/23/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals														
	OSW-6020B													
	Aluminum	7429-90-5	48.0	40.0	ug/l	---	ND	40.0	ug/l	---	224	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	0.94	2.0	ug/l	J	1.5	2.0	ug/l	J	0.62	2.0	ug/l	J
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	UJ	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	0.95	2.0	ug/l	J
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	0.79	2.0	ug/l	J
	Barium	7440-39-3	35.2	4.0	ug/l	---	66.3	4.0	ug/l	---	24.4	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	24.2	4.0	ug/l	---	47.5	4.0	ug/l	J	15.5	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	72400	200	ug/l	---	51000	200	ug/l	---	48800	200	ug/l	---
	Calcium - Dissolved	7440-70-2	73300	200	ug/l	---	45200	200	ug/l	---	42800	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	1.3	4.0	ug/l	J
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	9.8	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	7.3	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	5.2	4.0	ug/l	---	3.1	4.0	ug/l	J	7.9	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	13200	120	ug/l	---	14500	120	ug/l	---	375	120	ug/l	---
	Iron - Dissolved	7439-89-6	1060	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	ND	1.2	ug/l	---	0.42	1.2	ug/l	J	0.46	1.2	ug/l	UB
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	18800	200	ug/l	---	14700	200	ug/l	---	19000	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	17100	200	ug/l	---	13300	200	ug/l	---	16000	200	ug/l	---
	Manganese	7439-96-5	9800	8.0	ug/l	---	776	8.0	ug/l	---	109	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	11300	40.0	ug/l	---	671	8.0	ug/l	---	77.8	8.0	ug/l	---
	Nickel	7440-02-0	2.2	4.0	ug/l	J	1.4	4.0	ug/l	J	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	1.6	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	2440	200	ug/l	---	2280	200	ug/l	---	1850	200	ug/l	---
	Potassium - Dissolved	7440-09-7	2340	200	ug/l	---	2060	200	ug/l	---	1560	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	2.7	10.0	ug/l	J
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	2.3	10.0	ug/l	J
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	10500	200	ug/l	---	92400	200	ug/l	---	7210	200	ug/l	---
	Sodium - Dissolved	7440-23-5	7170	200	ug/l	---	77800	200	ug/l	---	5390	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	2.1	4.0	ug/l	J	ND	4.0	ug/l	---	5.2	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	3.8	4.0	ug/l	J
	Zinc	7440-66-6	7.2	16.0	ug/l	J	326	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	81.2	16.0	ug/l	---	ND	16.0	ug/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	3.50	0.12	mg/l	---	184	6.00	mg/l	---	33.6	1.20	mg/l	---
	Sulfate	14808-79-8	0.64	0.60	mg/l	---	6.63	0.60	mg/l	---	28.5	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	306	5.0	mg/l	---	146	5.0	mg/l	---	138	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	306	5.0	mg/l	---	146	5.0	mg/l	---	138	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	CMS-100-082318				CMS-160-082318				CMS-275-082318			
		Lab Sample ID:	4601633027				4601633028				4601633029			
		Sample Date:	8/23/2018				8/23/2018				8/23/2018			
				Report		Valid		Report		Valid		Report		Valid
Analyte	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
GC/MS SVOC													
OSW-8270D													
1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2(3H)-Benzothiazolone - TIC	934-34-9												
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzene, (1-methylethyl)- - TIC	98-82-8												
Benzene, chloro- - TIC	108-90-7												
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8												
Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cyclohexanamine, N-cyclohexyl- - TIC	101-83-7												
Cyclononasiloxane, octadecamethyl- - TIC	556-71-8												
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Hexadecanoic acid, butyl ester - TIC	111-06-8												
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
OSW-8270DSIM													
1,4-Dioxane	123-91-1	0.34	0.20	ug/l	B	0.33	0.20	ug/l	B	0.40	0.20	ug/l	B
Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163302-1

		Sample Name:	CMS-100-082318				CMS-160-082318				CMS-275-082318			
		Lab Sample ID:	4601633027				4601633028				4601633029			
		Sample Date:	8/23/2018				8/23/2018				8/23/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC Other														
	OSW-8082A													
	PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals														
	OSW-6020B													
	Aluminum	7429-90-5	ND	40.0	ug/l	---	17.6	40.0	ug/l	J	57.1	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	ND	2.0	ug/l	---	0.64	2.0	ug/l	J	0.98	2.0	ug/l	J
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	1.1	2.0	ug/l	J
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	68.9	4.0	ug/l	---	77.1	4.0	ug/l	---	141	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	50.2	4.0	ug/l	---	51.9	4.0	ug/l	---	78.4	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	3.2	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	49300	200	ug/l	---	54400	200	ug/l	---	83400	200	ug/l	---
	Calcium - Dissolved	7440-70-2	47200	200	ug/l	---	52200	200	ug/l	---	71400	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	1.9	4.0	ug/l	J	27.1	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	2.3	4.0	ug/l	J	5.8	4.0	ug/l	---	44.4	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	21200	120	ug/l	---	30200	120	ug/l	---	22700	120	ug/l	---
	Iron - Dissolved	7439-89-6	617	120	ug/l	---	969	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	0.44	1.2	ug/l	UB	3.4	1.2	ug/l	B	44.4	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	16300	200	ug/l	---	17400	200	ug/l	---	20200	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	13800	200	ug/l	---	14800	200	ug/l	---	16500	200	ug/l	---
	Manganese	7439-96-5	792	8.0	ug/l	---	869	8.0	ug/l	---	1240	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	720	8.0	ug/l	---	798	8.0	ug/l	---	977	8.0	ug/l	---
	Nickel	7440-02-0	1.6	4.0	ug/l	J	1.8	4.0	ug/l	J	8.7	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	4.2	4.0	ug/l	---
	Potassium	7440-09-7	2290	200	ug/l	---	2610	200	ug/l	---	7050	200	ug/l	---
	Potassium - Dissolved	7440-09-7	2140	200	ug/l	---	2530	200	ug/l	---	6040	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	98600	200	ug/l	---	109000	200	ug/l	---	58900	200	ug/l	---
	Sodium - Dissolved	7440-23-5	80500	200	ug/l	---	89800	200	ug/l	---	44000	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	1.5	4.0	ug/l	J
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	1080	16.0	ug/l	---	3440	80.0	ug/l	---	4730	80.0	ug/l	---
	Zinc - Dissolved	7440-66-6	523	16.0	ug/l	---	1420	16.0	ug/l	---	765	16.0	ug/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	185	6.00	mg/l	---	203	6.00	mg/l	---	74.4	2.40	mg/l	---
	Sulfate	14808-79-8	5.21	0.60	mg/l	---	2.99	0.60	mg/l	---	0.54	0.60	mg/l	J
Prep														
	APHA-2320B													
	Alkalinity	E-14506	147	5.0	mg/l	---	162	5.0	mg/l	---	334	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	147	5.0	mg/l	---	162	5.0	mg/l	---	334	5.0	mg/l	---

September 17, 2018

Tim Roeper
Cornerstone EG
100 Crystal Run Road
Suite 101
Middletown, NY 10941

CADENA project ID: E203361
Project: Ford Ringwood Mines Project
Project number:
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: TestAmerica - Edison
Laboratory submittal: 163415-1
Sample date: 2018-08-27
Report received by CADENA: 2018-09-14
Initial Data Verification completed by CADENA: 2018-09-17

The following minor QC exceptions or missing information were noted:

MBK - METHOD BLANKS had detections ABOVE the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 10X the method blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags :
GCMS VOC QC batch 548531 - ACETONE - B flags - samples -002 through -009 and -011 through -015.

MBK - METHOD BLANKS had detections BELOW the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 5X the method blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags :
GCMS VOC QC batch 548531 - MEK - UB flags - samples -002, -003.

TBK - TRIP BLANKS had detections BELOW the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 5X the method blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags :
GCMS VOC - METHYLENE CHLORIDE - UB flags - samples -013, -021.

LCS - LCS recoveries were outliers biased LOW for these analytes (or one LCS and the associated LCS/LCSD RPD). The listed client sample results should be considered to be estimated and qualified with J flags if detected or UJ flags if non-detect: .
GCMS VOC QC batch 548531 and 548838 - BROMOFORM - UJ flags - samples -001 through -009 and -011 through -015 and -019 through -030, -032, -033.

MSD - MS and MSD recovery outliers or one recovery and the MS/MSD RPD were outliers with the recovery biased LOW for these analytes. Results for the client sample spiked only should be considered to be estimated and qualified with a J flag if detected and UJ flags if non-detect for these analytes:
GCMS VOC sample -003 - UJ flag - BROMOFORM.
TOTAL CYANIDE sample -027 - UJ flag.

TIC - Tentatively Identified Compounds (TIC"s) detections reported for samples noted should all be considered to be estimated and qualified with NJ flags.
GCMS VOC

GCMS VOC CCV STANDARD response outliers as noted in the laboratory submittal case narrative were not used to qualify client sample results as part of this level 2 data package verification review.

MS/MSD spike concentrations were less than 4X the original sample concentration for the following analytes in the client sample noted so MS/MSD percent recoveries are not considered to be statistically reliable and were not used to qualify client sample results:
DISSOLVED METALS sample -026 - SODIUM, CALCIUM.
DISSOVLED METALS sample -003 - MANGANESE, SODIUM, MAGNESIUM, POTASSIUM, CALCIUM.
TOTAL METALS sample -003 - MANGANESE, SODIUM, CALCIUM.
ANIONS sample -026 - SULFATE, CHLORIDE.
ANIONS sample -032 - SULFATE, CHLORIDE.

MS/MSD recovery outliers or sample duplicate RPD outliers were not determined using a client sample from this submittal for the test and QC batch noted so qualification was not required based on these sample-specific QC outliers:
TOTAL METALS QC batches 549767, 550229.

Sample result for test and analyte noted below were NOT QUALIFIED based on low level concentration criteria (sample result less than 5X the lab RL so absolute difference between replicate values must be less than 2X RL for soil and less than 1X RL for water), even though laboratory report indicated duplicate RPD was an outlier based on high level criteria (laboratory RPD control limit):
TOTAL METALS sample -003 - COPPER.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

31 Water sample(s) and 2 field duplicate samples were analyzed for GCMS VOC, GCMS SVOC, Metals, General Chemistry and MISC parameter(s). 1 Trip blank was analyzed for GCMS VOC parameters.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, LCS/LCD RPD, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Edison
Laboratory Submittal: 163415-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	GCMS SVOC SIM	METALS BY ICPMS(D)	METALS BY ICPMS	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE CYANIDE (AUTOMATED COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
4601634151	PMB-01-082718	8/27/2018	10:45:00	X	X	X	X	X	X	X	X	X	X
46016341510	PAB-00-082718	8/27/2018	9:10:00	X	X	X	X	X	X	X	X	X	X
46016341511	PAB-01-082718	8/27/2018	8:30:00	X	X	X	X	X	X	X	X	X	X
46016341512	SW-11-082718	8/27/2018	8:45:00	X	X	X	X	X	X	X	X	X	X
46016341513	Dup-01-082718	8/27/2018	12:00:00	X	X	X	X	X	X	X	X	X	X
46016341514	PAB-01A-082718	8/27/2018	9:30:00	X	X	X	X	X	X	X	X	X	X
46016341515	PMP-POND-082718	8/27/2018	9:30:00	X	X	X	X	X	X	X	X	X	X
46016341516	SR3-POND-082718	8/27/2018	9:45:00	X	X	X	X	X	X	X	X	X	X
46016341517	SR3-Seep-01-082718	8/27/2018	10:00:00	X	X	X	X	X	X	X	X	X	X
46016341518	SR3-Seep-02-082718	8/27/2018	10:15:00	X	X	X	X	X	X	X	X	X	X
46016341519	SW-3-082718	8/27/2018	2:45:00	X	X	X	X	X	X	X	X	X	X
4601634152	Dup-02-082718	8/27/2018	11:00:00	X	X	X	X	X	X	X	X	X	X
46016341520	MRB-01-082718	8/27/2018	1:25:00	X	X	X	X	X	X	X	X	X	X
46016341521	MRB-00-082718	8/27/2018	1:00:00	X	X	X	X	X	X	X	X	X	X
46016341522	TB-01-082718	8/27/2018	12:00:00	X	X								
46016341523	RC-03-082718	8/27/2018	3:30:00	X	X	X	X	X	X	X	X	X	X
46016341524	SW-04-082718	8/27/2018	3:45:00	X	X	X	X	X	X	X	X	X	X
46016341525	SW-17-082718	8/27/2018	4:00:00	X	X	X	X	X	X	X	X	X	X
46016341526	SP-00-082718	8/27/2018	2:20:00	X	X	X	X	X	X	X	X	X	X
46016341527	SP-01-082718	8/27/2018	1:45:00	X	X	X	X	X	X	X	X	X	X
46016341528	RC-02-082718	8/27/2018	1:25:00	X	X	X	X	X	X	X	X	X	X
46016341529	RC-01-082718	8/27/2018	12:45:00	X	X	X	X	X	X	X	X	X	X
4601634153	PMB-01A-082718	8/27/2018	11:30:00	X	X	X	X	X	X	X	X	X	X
46016341530	PAB-03A-082718	8/27/2018	3:20:00	X	X	X	X	X	X	X	X	X	X
46016341531	PAB-04-082718	8/27/2018	2:50:00	X	X	X	X	X	X	X	X	X	X
46016341532	NOB-02-082718	8/27/2018	3:05:00	X	X	X	X	X	X	X	X	X	X
46016341533	RM-01-082718	8/27/2018	1:00:00	X	X	X	X	X	X	X	X	X	X
46016341534	PMB-02A-082718	8/27/2018	12:05:00	X	X	X	X	X	X	X	X	X	X
4601634154	PMB-02-082718	8/27/2018	12:00:00	X	X	X	X	X	X	X	X	X	X
4601634155	PAB-03-082718	8/27/2018	11:00:00	X	X	X	X	X	X	X	X	X	X
4601634156	PAB-02-082718	8/27/2018	11:30:00	X	X	X	X	X	X	X	X	X	X
4601634157	MRB-02-082718	8/27/2018	1:50:00	X	X	X	X	X	X	X	X	X	X
4601634158	MRB-03-082718	8/27/2018	2:15:00	X	X	X	X	X	X	X	X	X	X
4601634159	NOB-01-082718	8/27/2018	8:55:00	X	X	X	X	X	X	X	X	X	X

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	PMB-01-082718				PAB-01-082718				SW-11-082718				Dup-01-082718				PAB-01A-082718				PMP-POND-082718			
		Lab Sample ID:	4601634151				46016341511				46016341512				46016341513				46016341514				46016341515			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018				8/27/2018				8/27/2018				8/27/2018			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC																									
OSW-8260C																									
2-Butanone (MEK)	78-93-3																								
Acetone	67-64-1					5.6	5.0	ug/l	B	5.1	5.0	ug/l	B	5.3	5.0	ug/l	B	6.1	5.0	ug/l	B	7.6	5.0	ug/l	B
Bromoform	75-25-2	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Methylene Chloride	75-09-2													0.35	1.0	ug/l	UB								
General Chemistry																									
OSW-9012B																									
Cyanide, Total	57-12-5																								

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	SW-3-082718				Dup-02-082718				MRB-01-082718				MRB-00-082718				TB-01-082718				RC-03-082718			
		Lab Sample ID:	46016341519				4601634152				46016341520				46016341521				46016341522				46016341523			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018				8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																										
OSW-8260C																										
2-Butanone (MEK)	78-93-3						2.5	5.0	ug/l	UB																
Acetone	67-64-1						16	5.0	ug/l	B																
Bromoform	75-25-2		ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Methylene Chloride	75-09-2														0.39	1.0	ug/l	UB								
General Chemistry																										
OSW-9012B																										
Cyanide, Total	57-12-5																									

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	SW-04-082718				SP-00-082718				SP-01-082718				RC-02-082718				RC-01-082718				PMB-01A-082718			
		Lab Sample ID:	46016341524				46016341526				46016341527				46016341528				46016341529				4601634153			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018				8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																										
OSW-8260C																										
2-Butanone (MEK)	78-93-3																						2.2	5.0	ug/l	UB
Acetone	67-64-1																						9.3	5.0	ug/l	B
Bromoform	75-25-2		ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Methylene Chloride	75-09-2																									
General Chemistry																										
OSW-9012B																										
Cyanide, Total	57-12-5										ND	0.010	mg/l	UJ												

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	PAB-03A-082718				NOB-02-082718				RM-01-082718				PMB-02-082718				PAB-03-082718				PAB-02-082718			
		Lab Sample ID:	46016341530				46016341532				46016341533				4601634154				4601634155				4601634156			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018				8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																										
OSW-8260C																										
2-Butanone (MEK)	78-93-3														7.1	5.0	ug/l	B	7.0	5.0	ug/l	B	5.3	5.0	ug/l	B
Acetone	67-64-1																									
Bromoform	75-25-2		ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Methylene Chloride	75-09-2																									
General Chemistry																										
OSW-9012B																										
Cyanide, Total	57-12-5																									

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	MRB-02-082718				MRB-03-082718				NOB-01-082718			
		Lab Sample ID:	4601634157				4601634158				4601634159			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
	OSW-8260C													
	2-Butanone (MEK)	78-93-3												
	Acetone	67-64-1	6.3	5.0	ug/l	B	5.1	5.0	ug/l	B	6.4	5.0	ug/l	B
	Bromoform	75-25-2	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	Methylene Chloride	75-09-2												
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	PMB-01-082718				PAB-00-082718				PAB-01-082718			
		Lab Sample ID:	4601634151				46016341510				46016341511			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	6.3	5.0	ug/l	---	6.3	5.0	ug/l	---	5.6	5.0	ug/l	B
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	UJ	ND	1.0	ug/l	---	ND	1.0	ug/l	UJ
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	PMB-01-082718				PAB-00-082718				PAB-01-082718			
		Lab Sample ID:	4601634151				46016341510				46016341511			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	0.41	0.20	ug/l	---	ND	0.20	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	20.1	40.0	ug/l	J	32.9	40.0	ug/l	J	161	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	22.9	40.0	ug/l	J
	Antimony	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	0.75	2.0	ug/l	J
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	54.2	4.0	ug/l	---	52.3	4.0	ug/l	---	7.8	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	45.1	4.0	ug/l	---	45.9	4.0	ug/l	---	6.9	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	37900	200	ug/l	---	10900	200	ug/l	---	7240	200	ug/l	---
	Calcium - Dissolved	7440-70-2	39900	200	ug/l	---	10500	200	ug/l	---	6970	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	10800	120	ug/l	---	11400	120	ug/l	---	257	120	ug/l	---
	Iron - Dissolved	7439-89-6	60.2	120	ug/l	J	ND	120	ug/l	---	58.8	120	ug/l	J
	Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	8210	200	ug/l	---	2800	200	ug/l	---	2260	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	8080	200	ug/l	---	2470	200	ug/l	---	2150	200	ug/l	---
	Manganese	7439-96-5	2220	8.0	ug/l	---	246	8.0	ug/l	---	23.0	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	2280	8.0	ug/l	---	225	8.0	ug/l	---	ND	8.0	ug/l	---
	Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	1.4	4.0	ug/l	J
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	6370	200	ug/l	---	679	200	ug/l	---	464	200	ug/l	---
	Potassium - Dissolved	7440-09-7	6800	200	ug/l	---	619	200	ug/l	---	386	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	27800	200	ug/l	---	3460	200	ug/l	---	3500	200	ug/l	---
	Sodium - Dissolved	7440-23-5	28900	200	ug/l	---	3070	200	ug/l	---	3320	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	0.0021	0.010	mg/l	J	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A														
	Chloride	16887-00-6	32.9	2.40	mg/l	---	1.81	0.12	mg/l	---	1.70	0.12	mg/l	---
	Sulfate	14808-79-8	2.60	0.60	mg/l	---	3.03	0.60	mg/l	---	4.21	0.60	mg/l	---
APHA-2320B														
	Alkalinity	E-14506	152	5.0	mg/l	---	41.8	5.0	mg/l	---	26.2	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	152	5.0	mg/l	---	41.8	5.0	mg/l	---	26.2	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	SW-11-082718				Dup-01-082718				PAB-01A-082718			
		Lab Sample ID:	46016341512				46016341513				46016341514			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	5.1	5.0	ug/l	B	5.3	5.0	ug/l	B	6.1	5.0	ug/l	B
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	0.35	1.0	ug/l	UB	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	SW-11-082718				Dup-01-082718				PAB-01A-082718			
		Lab Sample ID:	46016341512				46016341513				46016341514			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270DSIM													
1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---	0.62	0.20	ug/l	---
Metals													
OSW-6020B													
Aluminum	7429-90-5	49.9	40.0	ug/l	---	49.5	40.0	ug/l	---	28.1	40.0	ug/l	J
Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
Antimony	7440-36-0	0.88	2.0	ug/l	J	0.97	2.0	ug/l	J	0.98	2.0	ug/l	J
Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Barium	7440-39-3	7.5	4.0	ug/l	---	7.5	4.0	ug/l	---	55.2	4.0	ug/l	---
Barium - Dissolved	7440-39-3	6.8	4.0	ug/l	---	6.6	4.0	ug/l	---	45.9	4.0	ug/l	---
Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Calcium	7440-70-2	6990	200	ug/l	---	7110	200	ug/l	---	14200	200	ug/l	---
Calcium - Dissolved	7440-70-2	6780	200	ug/l	---	6670	200	ug/l	---	13100	200	ug/l	---
Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Copper	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Iron	7439-89-6	256	120	ug/l	---	261	120	ug/l	---	6650	120	ug/l	---
Iron - Dissolved	7439-89-6	116	120	ug/l	J	114	120	ug/l	J	ND	120	ug/l	---
Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
Magnesium	7439-95-4	2220	200	ug/l	---	2250	200	ug/l	---	3120	200	ug/l	---
Magnesium - Dissolved	7439-95-4	2120	200	ug/l	---	2060	200	ug/l	---	2890	200	ug/l	---
Manganese	7439-96-5	40.3	8.0	ug/l	---	40.3	8.0	ug/l	---	544	8.0	ug/l	---
Manganese - Dissolved	7439-96-5	24.0	8.0	ug/l	---	23.9	8.0	ug/l	---	459	8.0	ug/l	---
Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Potassium	7440-09-7	402	200	ug/l	---	416	200	ug/l	---	932	200	ug/l	---
Potassium - Dissolved	7440-09-7	368	200	ug/l	---	366	200	ug/l	---	829	200	ug/l	---
Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Sodium	7440-23-5	3290	200	ug/l	---	3340	200	ug/l	---	3780	200	ug/l	---
Sodium - Dissolved	7440-23-5	3100	200	ug/l	---	3060	200	ug/l	---	3380	200	ug/l	---
Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A													
Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry													
OSW-9012B													
Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A													
Chloride	16887-00-6	1.69	0.12	mg/l	---	1.68	0.12	mg/l	---	1.98	0.12	mg/l	---
Sulfate	14808-79-8	4.48	0.60	mg/l	---	4.49	0.60	mg/l	---	2.49	0.60	mg/l	---
APHA-2320B													
Alkalinity	E-14506	25.7	5.0	mg/l	---	27.2	5.0	mg/l	---	53.5	5.0	mg/l	---
Bicarbonate Alkalinity as CaCO3	E-14508	25.7	5.0	mg/l	---	27.2	5.0	mg/l	---	53.5	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	PMP-POND-082718				SR3-POND-082718				SR3-Seep-01-082718			
		Lab Sample ID:	46016341515				46016341516				46016341517			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	7.6	5.0	ug/l	B	7.4	5.0	ug/l	---	6.0	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.53	1.0	ug/l	J
Bromoform	75-25-2	ND	1.0	ug/l	UJ	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	1.9	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	PMP-POND-082718				SR3-POND-082718				SR3-Seep-01-082718			
		Lab Sample ID:	46016341515				46016341516				46016341517			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270DSIM													
1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	1.4	0.20	ug/l	---	1.5	0.20	ug/l	---
Metals													
OSW-6020B													
Aluminum	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	68.2	40.0	ug/l	---
Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
Antimony	7440-36-0	0.93	2.0	ug/l	J	0.92	2.0	ug/l	J	0.90	2.0	ug/l	J
Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	1.4	2.0	ug/l	J
Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Barium	7440-39-3	94.2	4.0	ug/l	---	122	4.0	ug/l	---	198	4.0	ug/l	---
Barium - Dissolved	7440-39-3	75.7	4.0	ug/l	---	102	4.0	ug/l	---	147	4.0	ug/l	---
Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Calcium	7440-70-2	20000	200	ug/l	---	25200	200	ug/l	---	21900	200	ug/l	---
Calcium - Dissolved	7440-70-2	17500	200	ug/l	---	24700	200	ug/l	---	20400	200	ug/l	---
Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	2.2	4.0	ug/l	J
Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Copper	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Iron	7439-89-6	5720	120	ug/l	---	1570	120	ug/l	---	45800	120	ug/l	---
Iron - Dissolved	7439-89-6	90.6	120	ug/l	J	ND	120	ug/l	---	ND	120	ug/l	---
Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	1.1	1.2	ug/l	J
Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
Magnesium	7439-95-4	3140	200	ug/l	---	4130	200	ug/l	---	3450	200	ug/l	---
Magnesium - Dissolved	7439-95-4	2760	200	ug/l	---	4050	200	ug/l	---	3260	200	ug/l	---
Manganese	7439-96-5	352	8.0	ug/l	---	1180	8.0	ug/l	---	644	8.0	ug/l	---
Manganese - Dissolved	7439-96-5	143	8.0	ug/l	---	237	8.0	ug/l	---	537	8.0	ug/l	---
Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	1.5	4.0	ug/l	J
Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Potassium	7440-09-7	4310	200	ug/l	---	1920	200	ug/l	---	1610	200	ug/l	---
Potassium - Dissolved	7440-09-7	3760	200	ug/l	---	1850	200	ug/l	---	1510	200	ug/l	---
Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Sodium	7440-23-5	2330	200	ug/l	---	3560	200	ug/l	---	3730	200	ug/l	---
Sodium - Dissolved	7440-23-5	2010	200	ug/l	---	3460	200	ug/l	---	3340	200	ug/l	---
Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	3.6	4.0	ug/l	J
Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	5.4	16.0	ug/l	J
Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A													
Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry													
OSW-9012B													
Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A													
Chloride	16887-00-6	1.48	0.12	mg/l	---	2.18	0.12	mg/l	---	1.83	0.12	mg/l	---
Sulfate	14808-79-8	ND	0.60	mg/l	---	0.63	0.60	mg/l	---	0.99	0.60	mg/l	---
APHA-2320B													
Alkalinity	E-14506	67.8	5.0	mg/l	---	90.2	5.0	mg/l	---	78.6	5.0	mg/l	---
Bicarbonate Alkalinity as CaCO3	E-14508	67.8	5.0	mg/l	---	90.2	5.0	mg/l	---	78.6	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	SR3-Seep-02-082718				SW-3-082718				Dup-02-082718			
		Lab Sample ID:	46016341518				46016341519				4601634152			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	2.5	5.0	ug/l	UB
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	5.5	5.0	ug/l	---	5.1	5.0	ug/l	---	16	5.0	ug/l	B
Benzene	71-43-2	0.72	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	2.9	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	SR3-Seep-02-082718				SW-3-082718				Dup-02-082718			
		Lab Sample ID:	46016341518				46016341519				4601634152			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270DSIM													
1,4-Dioxane	123-91-1	1.6	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Metals													
OSW-6020B													
Aluminum	7429-90-5	63.7	40.0	ug/l	---	48.8	40.0	ug/l	---	23.3	40.0	ug/l	J
Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
Antimony	7440-36-0	0.93	2.0	ug/l	J	0.67	2.0	ug/l	J	ND	2.0	ug/l	---
Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic	7440-38-2	1.2	2.0	ug/l	J	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Barium	7440-39-3	186	4.0	ug/l	---	9.5	4.0	ug/l	---	52.4	4.0	ug/l	---
Barium - Dissolved	7440-39-3	142	4.0	ug/l	---	7.4	4.0	ug/l	---	45.0	4.0	ug/l	---
Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Calcium	7440-70-2	21200	200	ug/l	---	9310	200	ug/l	---	38000	200	ug/l	---
Calcium - Dissolved	7440-70-2	19500	200	ug/l	---	8840	200	ug/l	---	37800	200	ug/l	---
Chromium	7440-47-3	1.9	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Copper	7440-50-8	ND	4.0	ug/l	---	2.2	4.0	ug/l	J	ND	4.0	ug/l	---
Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Iron	7439-89-6	36000	120	ug/l	---	784	120	ug/l	---	11000	120	ug/l	---
Iron - Dissolved	7439-89-6	ND	120	ug/l	---	189	120	ug/l	---	85.8	120	ug/l	J
Lead	7439-92-1	0.96	1.2	ug/l	J	ND	1.2	ug/l	---	ND	1.2	ug/l	---
Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
Magnesium	7439-95-4	3320	200	ug/l	---	3320	200	ug/l	---	8240	200	ug/l	---
Magnesium - Dissolved	7439-95-4	3090	200	ug/l	---	3260	200	ug/l	---	7790	200	ug/l	---
Manganese	7439-96-5	618	8.0	ug/l	---	147	8.0	ug/l	---	2230	8.0	ug/l	---
Manganese - Dissolved	7439-96-5	534	8.0	ug/l	---	60.2	8.0	ug/l	---	2190	8.0	ug/l	---
Nickel	7440-02-0	1.4	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Potassium	7440-09-7	1580	200	ug/l	---	300	200	ug/l	---	6350	200	ug/l	---
Potassium - Dissolved	7440-09-7	1430	200	ug/l	---	267	200	ug/l	---	6450	200	ug/l	---
Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Sodium	7440-23-5	3870	200	ug/l	---	24500	200	ug/l	---	27600	200	ug/l	---
Sodium - Dissolved	7440-23-5	3210	200	ug/l	---	24300	200	ug/l	---	27000	200	ug/l	---
Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Vanadium	7440-62-2	2.9	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A													
Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry													
OSW-9012B													
Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A													
Chloride	16887-00-6	1.85	0.12	mg/l	---	37.0	2.40	mg/l	---	34.6	2.40	mg/l	---
Sulfate	14808-79-8	1.04	0.60	mg/l	---	3.02	0.60	mg/l	---	2.41	0.60	mg/l	---
APHA-2320B													
Alkalinity	E-14506	92.0	5.0	mg/l	---	30.5	5.0	mg/l	---	157	5.0	mg/l	---
Bicarbonate Alkalinity as CaCO3	E-14508	92.0	5.0	mg/l	---	30.5	5.0	mg/l	---	157	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	MRB-01-082718				MRB-00-082718				TB-01-082718			
		Lab Sample ID:	46016341520				46016341521				46016341522			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	6.0	5.0	ug/l	---	6.6	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	0.39	1.0	ug/l	UB	0.34	1.0	ug/l	J
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---				
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	MRB-01-082718				MRB-00-082718				TB-01-082718			
		Lab Sample ID:	46016341520				46016341521				46016341522			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
	OSW-8270DSIM													
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---				
Metals														
	OSW-6020B													
	Aluminum	7429-90-5	85.4	40.0	ug/l	---	191	40.0	ug/l	---				
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	16.5	40.0	ug/l	J				
	Antimony	7440-36-0	0.85	2.0	ug/l	J	0.80	2.0	ug/l	J				
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Barium	7440-39-3	9.1	4.0	ug/l	---	9.8	4.0	ug/l	---				
	Barium - Dissolved	7440-39-3	7.7	4.0	ug/l	---	8.1	4.0	ug/l	---				
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Calcium	7440-70-2	4110	200	ug/l	---	4070	200	ug/l	---				
	Calcium - Dissolved	7440-70-2	3920	200	ug/l	---	4230	200	ug/l	---				
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Copper	7440-50-8	2.4	4.0	ug/l	J	2.9	4.0	ug/l	J				
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Iron	7439-89-6	341	120	ug/l	---	363	120	ug/l	---				
	Iron - Dissolved	7439-89-6	68.7	120	ug/l	J	65.4	120	ug/l	J				
	Lead	7439-92-1	ND	1.2	ug/l	---	0.47	1.2	ug/l	J				
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---				
	Magnesium	7439-95-4	1610	200	ug/l	---	1610	200	ug/l	---				
	Magnesium - Dissolved	7439-95-4	1560	200	ug/l	---	1680	200	ug/l	---				
	Manganese	7439-96-5	33.3	8.0	ug/l	---	41.0	8.0	ug/l	---				
	Manganese - Dissolved	7439-96-5	4.9	8.0	ug/l	J	18.6	8.0	ug/l	---				
	Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Potassium	7440-09-7	454	200	ug/l	---	446	200	ug/l	---				
	Potassium - Dissolved	7440-09-7	420	200	ug/l	---	438	200	ug/l	---				
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---				
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---				
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Sodium	7440-23-5	3020	200	ug/l	---	2930	200	ug/l	---				
	Sodium - Dissolved	7440-23-5	2640	200	ug/l	---	2770	200	ug/l	---				
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---				
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---				
	OSW-7470A													
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---				
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---				
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---				
	OSW-9056A													
	Chloride	16887-00-6	1.59	0.12	mg/l	---	1.65	0.12	mg/l	---				
	Sulfate	14808-79-8	3.98	0.60	mg/l	---	4.15	0.60	mg/l	---				
	APHA-2320B													
	Alkalinity	E-14506	13.6	5.0	mg/l	---	14.3	5.0	mg/l	---				
	Bicarbonate Alkalinity as CaCO3	E-14508	13.6	5.0	mg/l	---	14.3	5.0	mg/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	RC-03-082718				SW-04-082718				SW-17-082718			
		Lab Sample ID:	46016341523				46016341524				46016341525			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	5.8	5.0	ug/l	---	5.0	5.0	ug/l	---	7.7	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	RC-03-082718				SW-04-082718				SW-17-082718			
		Lab Sample ID:	46016341523				46016341524				46016341525			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270DSIM													
1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Metals													
OSW-6020B													
Aluminum	7429-90-5	36.9	40.0	ug/l	J	35.3	40.0	ug/l	J	51.7	40.0	ug/l	---
Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
Antimony	7440-36-0	0.86	2.0	ug/l	J	0.79	2.0	ug/l	J	0.74	2.0	ug/l	J
Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Barium	7440-39-3	9.1	4.0	ug/l	---	12.3	4.0	ug/l	---	13.3	4.0	ug/l	---
Barium - Dissolved	7440-39-3	9.4	4.0	ug/l	---	12.4	4.0	ug/l	---	12.6	4.0	ug/l	---
Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Calcium	7440-70-2	8680	200	ug/l	---	20400	200	ug/l	---	20600	200	ug/l	---
Calcium - Dissolved	7440-70-2	9660	200	ug/l	---	21700	200	ug/l	---	22500	200	ug/l	---
Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Copper	7440-50-8	ND	4.0	ug/l	---	2.0	4.0	ug/l	J	2.4	4.0	ug/l	J
Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Iron	7439-89-6	461	120	ug/l	---	431	120	ug/l	---	602	120	ug/l	---
Iron - Dissolved	7439-89-6	197	120	ug/l	---	73.0	120	ug/l	J	70.6	120	ug/l	J
Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
Magnesium	7439-95-4	2660	200	ug/l	---	6090	200	ug/l	---	6120	200	ug/l	---
Magnesium - Dissolved	7439-95-4	2830	200	ug/l	---	6270	200	ug/l	---	6480	200	ug/l	---
Manganese	7439-96-5	69.4	8.0	ug/l	---	69.4	8.0	ug/l	---	120	8.0	ug/l	---
Manganese - Dissolved	7439-96-5	13.7	8.0	ug/l	---	25.4	8.0	ug/l	---	45.0	8.0	ug/l	---
Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Potassium	7440-09-7	698	200	ug/l	---	1700	200	ug/l	---	1740	200	ug/l	---
Potassium - Dissolved	7440-09-7	697	200	ug/l	---	1730	200	ug/l	---	1760	200	ug/l	---
Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Sodium	7440-23-5	14900	200	ug/l	---	42200	200	ug/l	---	40500	200	ug/l	---
Sodium - Dissolved	7440-23-5	15700	200	ug/l	---	44000	200	ug/l	---	43300	200	ug/l	---
Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A													
Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry													
OSW-9012B													
Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A													
Chloride	16887-00-6	22.2	1.20	mg/l	---	58.0	2.40	mg/l	---	59.4	2.40	mg/l	---
Sulfate	14808-79-8	4.65	0.60	mg/l	---	4.67	0.60	mg/l	---	4.53	0.60	mg/l	---
APHA-2320B													
Alkalinity	E-14506	25.0	5.0	mg/l	---	68.1	5.0	mg/l	---	69.6	5.0	mg/l	---
Bicarbonate Alkalinity as CaCO3	E-14508	25.0	5.0	mg/l	---	68.1	5.0	mg/l	---	69.6	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	SP-00-082718				SP-01-082718				RC-02-082718			
		Lab Sample ID:	46016341526				46016341527				46016341528			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	11	5.0	ug/l	---	6.4	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

			Sample Name:	SP-00-082718				SP-01-082718				RC-02-082718			
			Lab Sample ID:	46016341526				46016341527				46016341528			
			Sample Date:	8/27/2018				8/27/2018				8/27/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
	OSW-8270DSIM													
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Metals														
	OSW-6020B													
	Aluminum	7429-90-5	54.7	40.0	ug/l	---	34.1	40.0	ug/l	J	38.7	40.0	ug/l	J
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	ND	2.0	ug/l	---	0.78	2.0	ug/l	J	0.82	2.0	ug/l	J
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	9.5	4.0	ug/l	---	10.4	4.0	ug/l	---	9.0	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	7.9	4.0	ug/l	---	9.5	4.0	ug/l	---	9.5	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	8770	200	ug/l	---	8820	200	ug/l	---	8870	200	ug/l	---
	Calcium - Dissolved	7440-70-2	8450	200	ug/l	---	9600	200	ug/l	---	9100	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	4.4	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	474	120	ug/l	---	516	120	ug/l	---	480	120	ug/l	---
	Iron - Dissolved	7439-89-6	161	120	ug/l	---	205	120	ug/l	---	168	120	ug/l	---
	Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	2750	200	ug/l	---	2700	200	ug/l	---	2670	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	2500	200	ug/l	---	2830	200	ug/l	---	2740	200	ug/l	---
	Manganese	7439-96-5	47.5	8.0	ug/l	---	105	8.0	ug/l	---	78.8	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	ND	8.0	ug/l	---	25.9	8.0	ug/l	---	13.1	8.0	ug/l	---
	Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	657	200	ug/l	---	681	200	ug/l	---	696	200	ug/l	---
	Potassium - Dissolved	7440-09-7	618	200	ug/l	---	685	200	ug/l	---	680	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	14600	200	ug/l	---	14900	200	ug/l	---	14900	200	ug/l	---
	Sodium - Dissolved	7440-23-5	13800	200	ug/l	---	15600	200	ug/l	---	15500	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	UJ	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	22.1	1.20	mg/l	---	21.7	2.40	mg/l	---	22.2	2.40	mg/l	---
	Sulfate	14808-79-8	4.58	0.60	mg/l	---	4.62	0.60	mg/l	---	4.63	0.60	mg/l	---
	APHA-2320B													
	Alkalinity	E-14506	25.2	5.0	mg/l	---	25.3	5.0	mg/l	---	24.6	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	25.2	5.0	mg/l	---	25.3	5.0	mg/l	---	24.6	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	RC-01-082718				PMB-01A-082718				PAB-03A-082718			
		Lab Sample ID:	46016341529				4601634153				46016341530			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	2.2	5.0	ug/l	UB	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	6.6	5.0	ug/l	---	9.3	5.0	ug/l	B	5.3	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	RC-01-082718				PMB-01A-082718				PAB-03A-082718			
		Lab Sample ID:	46016341529				4601634153				46016341530			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
	OSW-8270DSIM													
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---	0.42	0.20	ug/l	---
Metals														
	OSW-6020B													
	Aluminum	7429-90-5	48.6	40.0	ug/l	---	82.5	40.0	ug/l	---	44.0	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	0.78	2.0	ug/l	J	0.85	2.0	ug/l	J	0.88	2.0	ug/l	J
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	8.7	4.0	ug/l	---	40.1	4.0	ug/l	---	21.0	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	8.2	4.0	ug/l	---	34.1	4.0	ug/l	---	19.9	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	8180	200	ug/l	---	39500	200	ug/l	---	17700	200	ug/l	---
	Calcium - Dissolved	7440-70-2	9090	200	ug/l	---	38900	200	ug/l	---	19100	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	ND	4.0	ug/l	---	2.6	4.0	ug/l	J	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	416	120	ug/l	---	3120	120	ug/l	---	1080	120	ug/l	---
	Iron - Dissolved	7439-89-6	158	120	ug/l	---	ND	120	ug/l	---	116	120	ug/l	J
	Lead	7439-92-1	ND	1.2	ug/l	---	0.44	1.2	ug/l	J	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	2530	200	ug/l	---	8370	200	ug/l	---	3830	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	2690	200	ug/l	---	8350	200	ug/l	---	4060	200	ug/l	---
	Manganese	7439-96-5	58.2	8.0	ug/l	---	2000	8.0	ug/l	---	70.7	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	6.4	8.0	ug/l	J	1780	8.0	ug/l	---	ND	8.0	ug/l	---
	Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	584	200	ug/l	---	7180	200	ug/l	---	732	200	ug/l	---
	Potassium - Dissolved	7440-09-7	605	200	ug/l	---	7130	200	ug/l	---	766	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	14700	200	ug/l	---	39200	200	ug/l	---	5390	200	ug/l	---
	Sodium - Dissolved	7440-23-5	15300	200	ug/l	---	40100	200	ug/l	---	5620	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	21.8	1.20	mg/l	---	50.7	2.40	mg/l	---	5.41	0.12	mg/l	---
	Sulfate	14808-79-8	4.58	0.60	mg/l	---	1.83	0.60	mg/l	---	1.92	0.60	mg/l	---
	APHA-2320B													
	Alkalinity	E-14506	22.7	5.0	mg/l	---	150	5.0	mg/l	---	61.4	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	22.7	5.0	mg/l	---	150	5.0	mg/l	---	61.4	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	PAB-04-082718				NOB-02-082718				RM-01-082718			
		Lab Sample ID:	46016341531				46016341532				46016341533			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	5.1	5.0	ug/l	---	6.4	5.0	ug/l	---	9.5	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	PAB-04-082718				NOB-02-082718				RM-01-082718			
		Lab Sample ID:	46016341531				46016341532				46016341533			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270DSIM													
1,4-Dioxane	123-91-1	0.40	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Metals													
OSW-6020B													
Aluminum	7429-90-5	62.7	40.0	ug/l	---	208	40.0	ug/l	---	106	40.0	ug/l	---
Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	19.6	40.0	ug/l	J	19.7	40.0	ug/l	J
Antimony	7440-36-0	0.72	2.0	ug/l	J	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Barium	7440-39-3	21.5	4.0	ug/l	---	8.1	4.0	ug/l	---	8.7	4.0	ug/l	---
Barium - Dissolved	7440-39-3	19.0	4.0	ug/l	---	7.2	4.0	ug/l	---	8.6	4.0	ug/l	---
Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Calcium	7440-70-2	17200	200	ug/l	---	7810	200	ug/l	---	6890	200	ug/l	---
Calcium - Dissolved	7440-70-2	18700	200	ug/l	---	8490	200	ug/l	---	8480	200	ug/l	---
Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Copper	7440-50-8	ND	4.0	ug/l	---	3.9	4.0	ug/l	J	4.3	4.0	ug/l	---
Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Iron	7439-89-6	922	120	ug/l	---	324	120	ug/l	---	328	120	ug/l	---
Iron - Dissolved	7439-89-6	92.4	120	ug/l	J	62.5	120	ug/l	J	108	120	ug/l	J
Lead	7439-92-1	ND	1.2	ug/l	---	0.46	1.2	ug/l	J	1.5	1.2	ug/l	---
Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
Magnesium	7439-95-4	3760	200	ug/l	---	3540	200	ug/l	---	2230	200	ug/l	---
Magnesium - Dissolved	7439-95-4	3970	200	ug/l	---	3620	200	ug/l	---	2640	200	ug/l	---
Manganese	7439-96-5	85.1	8.0	ug/l	---	21.7	8.0	ug/l	---	47.2	8.0	ug/l	---
Manganese - Dissolved	7439-96-5	ND	8.0	ug/l	---	ND	8.0	ug/l	---	ND	8.0	ug/l	---
Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Potassium	7440-09-7	747	200	ug/l	---	678	200	ug/l	---	589	200	ug/l	---
Potassium - Dissolved	7440-09-7	769	200	ug/l	---	676	200	ug/l	---	688	200	ug/l	---
Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Sodium	7440-23-5	5310	200	ug/l	---	2970	200	ug/l	---	16000	200	ug/l	---
Sodium - Dissolved	7440-23-5	5530	200	ug/l	---	2960	200	ug/l	---	16200	200	ug/l	---
Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
Vanadium	7440-62-2	ND	4.0	ug/l	---	1.2	4.0	ug/l	J	ND	4.0	ug/l	---
Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A													
Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry													
OSW-9012B													
Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A													
Chloride	16887-00-6	5.25	0.12	mg/l	---	1.65	0.12	mg/l	---	23.3	1.20	mg/l	---
Sulfate	14808-79-8	2.02	0.60	mg/l	---	3.95	0.60	mg/l	---	5.03	0.60	mg/l	---
APHA-2320B													
Alkalinity	E-14506	59.9	5.0	mg/l	---	32.6	5.0	mg/l	---	21.1	5.0	mg/l	---
Bicarbonate Alkalinity as CaCO3	E-14508	59.9	5.0	mg/l	---	32.6	5.0	mg/l	---	21.1	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	PMB-02A-082718				PMB-02-082718				PAB-03-082718			
		Lab Sample ID:	46016341534				4601634154				4601634155			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	6.0	5.0	ug/l	---	7.1	5.0	ug/l	B	7.0	5.0	ug/l	B
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	PMB-02A-082718				PMB-02-082718				PAB-03-082718			
		Lab Sample ID:	46016341534				4601634154				4601634155			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---	0.44	0.20	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	38.7	40.0	ug/l	J	24.1	40.0	ug/l	J	15.5	40.0	ug/l	J
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	16.7	4.0	ug/l	---	17.2	4.0	ug/l	---	46.4	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	18.9	4.0	ug/l	---	16.7	4.0	ug/l	---	40.1	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	34500	200	ug/l	---	40500	200	ug/l	---	18400	200	ug/l	---
	Calcium - Dissolved	7440-70-2	38600	200	ug/l	---	40600	200	ug/l	---	17600	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	4.0	4.0	ug/l	---	2.0	4.0	ug/l	J	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	355	120	ug/l	---	488	120	ug/l	---	3870	120	ug/l	---
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---	397	120	ug/l	---
	Lead	7439-92-1	0.50	1.2	ug/l	J	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	9890	200	ug/l	---	11300	200	ug/l	---	3940	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	10500	200	ug/l	---	10600	200	ug/l	---	3520	200	ug/l	---
	Manganese	7439-96-5	211	8.0	ug/l	---	279	8.0	ug/l	---	853	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	128	8.0	ug/l	---	190	8.0	ug/l	---	755	8.0	ug/l	---
	Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	4340	200	ug/l	---	5460	200	ug/l	---	502	200	ug/l	---
	Potassium - Dissolved	7440-09-7	4680	200	ug/l	---	5440	200	ug/l	---	457	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	39900	200	ug/l	---	41900	200	ug/l	---	6140	200	ug/l	---
	Sodium - Dissolved	7440-23-5	40700	200	ug/l	---	40000	200	ug/l	---	5390	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A														
	Chloride	16887-00-6	53.2	3.00	mg/l	---	54.6	2.40	mg/l	---	5.60	0.12	mg/l	---
	Sulfate	14808-79-8	5.14	0.60	mg/l	---	5.24	0.60	mg/l	---	1.24	0.60	mg/l	---
APHA-2320B														
	Alkalinity	E-14506	122	5.0	mg/l	---	142	5.0	mg/l	---	65.6	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	122	5.0	mg/l	---	142	5.0	mg/l	---	65.6	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	PAB-02-082718				MRB-02-082718				MRB-03-082718			
		Lab Sample ID:	4601634156				4601634157				4601634158			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	5.3	5.0	ug/l	B	6.3	5.0	ug/l	B	5.1	5.0	ug/l	B
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

		Sample Name:	PAB-02-082718				MRB-02-082718				MRB-03-082718			
		Lab Sample ID:	4601634156				4601634157				4601634158			
		Sample Date:	8/27/2018				8/27/2018				8/27/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	0.52	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	1470	40.0	ug/l	---	91.1	40.0	ug/l	---	47.8	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	5.4	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	74.1	4.0	ug/l	---	11.0	4.0	ug/l	---	9.9	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	37.9	4.0	ug/l	---	8.6	4.0	ug/l	---	8.3	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	19300	200	ug/l	---	4920	200	ug/l	---	6690	200	ug/l	---
	Calcium - Dissolved	7440-70-2	15200	200	ug/l	---	4510	200	ug/l	---	6240	200	ug/l	---
	Chromium	7440-47-3	2.3	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	2.3	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	14.7	4.0	ug/l	---	2.1	4.0	ug/l	J	2.1	4.0	ug/l	J
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	8090	120	ug/l	---	886	120	ug/l	---	432	120	ug/l	---
	Iron - Dissolved	7439-89-6	495	120	ug/l	---	173	120	ug/l	---	108	120	ug/l	J
	Lead	7439-92-1	5.5	1.2	ug/l	---	0.38	1.2	ug/l	J	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	4470	200	ug/l	---	1930	200	ug/l	---	2630	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	3130	200	ug/l	---	1710	200	ug/l	---	2320	200	ug/l	---
	Manganese	7439-96-5	982	8.0	ug/l	---	168	8.0	ug/l	---	87.0	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	8.8	8.0	ug/l	---	60.8	8.0	ug/l	---	19.8	8.0	ug/l	---
	Nickel	7440-02-0	4.0	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	1280	200	ug/l	---	205	200	ug/l	---	319	200	ug/l	---
	Potassium - Dissolved	7440-09-7	1080	200	ug/l	---	174	200	ug/l	J	277	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	5670	200	ug/l	---	3470	200	ug/l	---	9810	200	ug/l	---
	Sodium - Dissolved	7440-23-5	5370	200	ug/l	---	2900	200	ug/l	---	9350	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	7.5	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	23.3	16.0	ug/l	---	9.5	16.0	ug/l	J	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
OSW-9012B														
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A														
	Chloride	16887-00-6	5.24	0.12	mg/l	---	2.17	0.12	mg/l	---	13.8	0.60	mg/l	---
	Sulfate	14808-79-8	2.18	0.60	mg/l	---	3.34	0.60	mg/l	---	3.96	0.60	mg/l	---
APHA-2320B														
	Alkalinity	E-14506	57.3	5.0	mg/l	---	17.1	5.0	mg/l	---	21.4	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	57.3	5.0	mg/l	---	17.1	5.0	mg/l	---	21.4	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

Sample Name: NOB-01-082718
Lab Sample ID: 4601634159
Sample Date: 8/27/2018

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC					
OSW-8260C					
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---
Acetone	67-64-1	6.4	5.0	ug/l	B
Benzene	71-43-2	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	UJ
Bromomethane	74-83-9	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---
OSW-8260CSIM					
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163415-1

Sample Name: NOB-01-082718
Lab Sample ID: 4601634159
Sample Date: 8/27/2018

Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC					
OSW-8270DSIM					
1,4-Dioxane	123-91-1	ND	0.20	ug/l	---
Metals					
OSW-6020B					
Aluminum	7429-90-5	3020	40.0	ug/l	---
Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---
Antimony	7440-36-0	ND	2.0	ug/l	---
Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---
Arsenic	7440-38-2	ND	2.0	ug/l	---
Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---
Barium	7440-39-3	65.7	4.0	ug/l	---
Barium - Dissolved	7440-39-3	14.8	4.0	ug/l	---
Beryllium	7440-41-7	0.42	0.80	ug/l	J
Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---
Cadmium	7440-43-9	ND	2.0	ug/l	---
Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---
Calcium	7440-70-2	7990	200	ug/l	---
Calcium - Dissolved	7440-70-2	6740	200	ug/l	---
Chromium	7440-47-3	3.9	4.0	ug/l	J
Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---
Cobalt	7440-48-4	1.8	4.0	ug/l	J
Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---
Copper	7440-50-8	7.2	4.0	ug/l	---
Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---
Iron	7439-89-6	3140	120	ug/l	---
Iron - Dissolved	7439-89-6	ND	120	ug/l	---
Lead	7439-92-1	9.5	1.2	ug/l	---
Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---
Magnesium	7439-95-4	2690	200	ug/l	---
Magnesium - Dissolved	7439-95-4	2030	200	ug/l	---
Manganese	7439-96-5	866	8.0	ug/l	---
Manganese - Dissolved	7439-96-5	ND	8.0	ug/l	---
Nickel	7440-02-0	4.8	4.0	ug/l	---
Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---
Potassium	7440-09-7	939	200	ug/l	---
Potassium - Dissolved	7440-09-7	704	200	ug/l	---
Selenium	7782-49-2	ND	10.0	ug/l	---
Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---
Silver	7440-22-4	ND	2.0	ug/l	---
Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---
Sodium	7440-23-5	2930	200	ug/l	---
Sodium - Dissolved	7440-23-5	2600	200	ug/l	---
Thallium	7440-28-0	ND	0.80	ug/l	---
Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---
Vanadium	7440-62-2	6.9	4.0	ug/l	---
Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---
Zinc	7440-66-6	103	16.0	ug/l	---
Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---
OSW-7470A					
Mercury	7439-97-6	ND	0.20	ug/l	---
Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---
General Chemistry					
OSW-9012B					
Cyanide, Total	57-12-5	ND	0.010	mg/l	---
OSW-9056A					
Chloride	16887-00-6	1.26	0.12	mg/l	---
Sulfate	14808-79-8	5.57	0.60	mg/l	---
APHA-2320B					
Alkalinity	E-14506	25.3	5.0	mg/l	---
Bicarbonate Alkalinity as CaCO3	E-14508	25.3	5.0	mg/l	---

September 14, 2018

Tim Roeper
Cornerstone EG
100 Crystal Run Road
Suite 101
Middletown, NY 10941

CADENA project ID: E203361
Project: Ford Ringwood Mines Project
Project number:
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: TestAmerica - Edison
Laboratory submittal: 163526-1
Sample date: 2018-08-28 2018-08-29
Report received by CADENA: 2018-09-13
Initial Data Verification completed by CADENA: 2018-09-14

The following minor QC exceptions or missing information were noted:

TIC - Tentatively Identified Compounds (TIC's) detections reported for samples noted should all be considered to be estimated and qualified with NJ flags.
GCMS VOC, GCMS SVOC.

LCS - LCS recoveries were outliers biased LOW for these analytes (or one LCS and the associated LCS/LCSD RPD). The listed client sample results should be considered to be estimated and qualified with J flags if detected or UJ flags if non-detect: .
GCMS SVOC QC batch 548982 - 2-METHYLPHENOL, HEXACHLOROBUTADIENE, CAPROLACTAM - UJ flags - samples -001, -002, -003, -004, -005, -006, -007.
GCMS SVOC QC batch 548983 - 2,2-oxybis(1-chloropropane), 2-CHLOROPHENOL, 2-METHYLPHENOL - UJ flags - sample -008.

LCS or LCSD recoveries but not both or LCS/LCSD RPD only were outliers so client sample results were not qualified based on these QC outliers alone:
GCMS VOC QC batch 549428 - TRICHLOROFLUOROMETHANE.
GCMS SVOC QC batch 548982 - 2-CHLOROPHENOL, 4-NITROPHENOL, PHENOL.
GCMS SVOC-SIM QC batch 548982 and 548983 - PENTACHLOROPHENOL, HEXACHLOROBENZENE.

GCMS SVOC, GCMS SVOC-SIM analytical CCV STANDARD response outliers as noted in the laboratory submittal case narrative were not used to qualify client sample results as part of this level 2 data package verification review.

MS/MSD recovery outliers or sample duplicate RPD outliers were not determined using a client sample from this submittal for the test and QC batch noted so qualification was not required based on these sample-specific QC outliers:
GCMS SVOC QC batch 548983
TOTAL METALS QC batch 550229, 549767
TOTAL CYANIDE QC batch 550322.

LCS recoveries were outliers biased HIGH for these tests and analytes (or one LCS and the associated LCS/LCSD RPD). All associated client sample results were non-detect for these analytes so were not affected by the high bias and qualification was not required:
GCMS SVOC-SIM QC batch 548986 - DIBENZO(AH)ANTHRACENE.

MS/MSD spike concentrations were less than 4X the original sample concentration for the following analytes in the client sample noted so MS/MSD percent recoveries are not considered to be statistically reliable and were not used to qualify client sample results:
DISSOLVED METALS - sample -001 - MANGANESE, SODIUM, CALCIUM.
ANIONS - sample -004 - CHLORIDE, SULFATE.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

8 Water sample(s) were analyzed for GCMS VOC, GCMS SVOC, GC Other, Metals, General Chemistry and MISC parameter(s). 1 Trip blank was analyzed for GCMS VOC parameters.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, LCS/LCD RPD, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Edison
Laboratory Submittal: 163526-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	METALS BY ICPMS(D)	METALS BY ICPMS	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE CYANIDE (AUTOMATED COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
4601635261	RW2 (279-289)-082818	8/28/2018	10:50:00	X	X	X	X	X	X	X	X	X	X	X	X
4601635262	RW2 (252-262)-082818	8/28/2018	11:30:00	X	X	X	X	X	X	X	X	X	X	X	X
4601635263	RW10A (51-61)-082818	8/28/2018	1:00:00	X	X	X	X	X	X	X	X	X	X	X	X
4601635264	RW10A (75-85)-082818	8/28/2018	1:20:00	X	X	X	X	X	X	X	X	X	X	X	X
4601635265	RW10 (120-130)-082818	8/28/2018	2:20:00	X	X	X	X	X	X	X	X	X	X	X	X
4601635266	RW10 (185-195)-082818	8/28/2018	2:35:00	X	X	X	X	X	X	X	X	X	X	X	X
4601635267	RW12 (55-65)-082918	8/29/2018	8:50:00	X	X	X	X	X	X	X	X	X	X	X	X
4601635268	RW12 (130-140)-082918	8/29/2018	9:40:00	X	X	X	X	X	X	X	X	X	X	X	X
4601635269	TB-04-082918	8/29/2018	12:00:00	X	X										

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163526-1

		Sample Name:	RW2 (279-289)-082818				RW2 (252-262)-082818				RW10A (51-61)-082818				RW10A (75-85)-082818				RW10 (120-130)-082818				RW10 (185-195)-082818				RW12 (55-65)-082918				RW12 (130-140)-082918			
		Lab Sample ID:	4601635261				4601635262				4601635263				4601635264				4601635265				4601635266				4601635267				4601635268			
		Sample Date:	8/28/2018				8/28/2018				8/28/2018				8/28/2018				8/28/2018				8/28/2018				8/29/2018				8/29/2018			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																																		
OSW-8260C																																		
1-Hexanol, 2-ethyl- - TIC	104-76-7																										10	---	ug/l	NJ				
1-Propene, 2-methyl- - TIC	115-11-7						13	---	ug/l	NJ																								
GC/MS SVOC																																		
OSW-8270D																																		
2-Chlorophenol	95-57-8																														ND	10	ug/l	UJ
2-Methylphenol	95-48-7		ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Benzenesulfonamide, N-butyl- - TIC	3622-84-2																										14	---	ug/l	NJ				
Caprolactam	105-60-2		ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ				
Diethyltoluamide - TIC	134-62-3										39	---	ug/l	NJ																				
Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5																										42	---	ug/l	NJ				
Hexachlorobutadiene	87-68-3		ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ				
Unknown - TIC	Tic1		7.3	---	ug/l	NJ	13	---	ug/l	NJ																	7.9	---	ug/l	NJ	7.2	---	ug/l	NJ
Unknown - TIC	Tic2																										9.2	---	ug/l	NJ				
Unknown - TIC	Tic3																										14	---	ug/l	NJ				
Unknown - TIC	Tic4																										7.9	---	ug/l	NJ				
Unknown - TIC	Tic5																										34	---	ug/l	NJ				
Unknown - TIC	Tic6																										13	---	ug/l	NJ				
Unknown - TIC	Tic7																										7.5	---	ug/l	NJ				
Unknown - TIC	Tic8																										9.0	---	ug/l	NJ				
Unknown - TIC	Tic9																										6.7	---	ug/l	NJ				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163526-1

		Sample Name:	RW2 (279-289)-082818				RW2 (252-262)-082818				RW10A (51-61)-082818			
		Lab Sample ID:	4601635261				4601635262				4601635263			
		Sample Date:	8/28/2018				8/28/2018				8/28/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	0.51	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	0.98	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Hexanol, 2-ethyl- - TIC	104-76-7												
1-Propene, 2-methyl- - TIC	115-11-7					13	---	ug/l	NJ				
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	5.5	5.0	ug/l	---	13	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	4.2	1.0	ug/l	---	0.41	1.0	ug/l	J
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	8.6	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	0.35	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	0.48	1.0	ug/l	J	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	0.34	1.0	ug/l	J	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	0.44	1.0	ug/l	J	0.82	1.0	ug/l	J	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163526-1

		Sample Name:	RW2 (279-289)-082818				RW2 (252-262)-082818				RW10A (51-61)-082818			
		Lab Sample ID:	4601635261				4601635262				4601635263			
		Sample Date:	8/28/2018				8/28/2018				8/28/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2												
	Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyltoluamide - TIC	134-62-3									39	---	ug/l	NJ
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5												
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol	108-95-2	2.6	10	ug/l	J	8.2	10	ug/l	J	ND	10	ug/l	---
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Unknown - TIC	Tic1	7.3	---	ug/l	NJ	13	---	ug/l	NJ				
	Unknown - TIC	Tic2												
	Unknown - TIC	Tic3												
	Unknown - TIC	Tic4												
	Unknown - TIC	Tic5												
	Unknown - TIC	Tic6												
	Unknown - TIC	Tic7												
	Unknown - TIC	Tic8												
	Unknown - TIC	Tic9												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163526-1

		Sample Name:	RW2 (279-289)-082818				RW2 (252-262)-082818				RW10A (51-61)-082818			
		Lab Sample ID:	4601635261				4601635262				4601635263			
		Sample Date:	8/28/2018				8/28/2018				8/28/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	8.1	0.20	ug/l	---	0.82	0.20	ug/l	---	ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	0.027	0.030	ug/l	J	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	50.7	40.0	ug/l	---	46.1	40.0	ug/l	---	16.5	40.0	ug/l	J
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	41.7	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	7.1	2.0	ug/l	---	4.4	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	1.2	2.0	ug/l	J	5.1	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3	217	4.0	ug/l	---	54.1	4.0	ug/l	---	9.1	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	109	4.0	ug/l	---	53.9	4.0	ug/l	---	8.2	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	133000	200	ug/l	---	108000	200	ug/l	---	57300	200	ug/l	---
	Calcium - Dissolved	7440-70-2	128000	200	ug/l	---	107000	200	ug/l	---	54200	200	ug/l	---
	Chromium	7440-47-3	2.2	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	13.8	4.0	ug/l	---	ND	4.0	ug/l	---	15.8	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	11.9	4.0	ug/l	---	ND	4.0	ug/l	---	15.5	4.0	ug/l	---
	Copper	7440-50-8	2.5	4.0	ug/l	J	ND	4.0	ug/l	---	2.5	4.0	ug/l	J
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	27500	120	ug/l	---	ND	120	ug/l	---	339	120	ug/l	---
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	0.40	1.2	ug/l	J
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	50100	200	ug/l	---	ND	200	ug/l	---	15700	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	49300	200	ug/l	---	ND	200	ug/l	---	13700	200	ug/l	---
	Manganese	7439-96-5	5730	8.0	ug/l	---	ND	8.0	ug/l	---	4370	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	5400	8.0	ug/l	---	ND	8.0	ug/l	---	4580	8.0	ug/l	---
	Nickel	7440-02-0	12.4	4.0	ug/l	---	5.7	4.0	ug/l	---	11.9	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	10.6	4.0	ug/l	---	4.8	4.0	ug/l	---	12.7	4.0	ug/l	---
	Potassium	7440-09-7	7830	200	ug/l	---	58500	200	ug/l	---	2650	200	ug/l	---
	Potassium - Dissolved	7440-09-7	7610	200	ug/l	---	57300	200	ug/l	---	2450	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	2.3	10.0	ug/l	J	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	3.5	10.0	ug/l	J	ND	10.0	ug/l	---
	Silver	7440-22-4	4.5	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	112000	200	ug/l	---	306000	200	ug/l	---	13500	200	ug/l	---
	Sodium - Dissolved	7440-23-5	105000	200	ug/l	---	287000	200	ug/l	---	12400	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	10.3	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	12.2	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	15.4	16.0	ug/l	J	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163526-1

		Sample Name:	RW2 (279-289)-082818				RW2 (252-262)-082818				RW10A (51-61)-082818			
		Lab Sample ID:	4601635261				4601635262				4601635263			
		Sample Date:	8/28/2018				8/28/2018				8/28/2018			
				Report		Valid		Report		Valid		Report		Valid
Analyte		Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	0.0020	0.010	mg/l	J
	OSW-9056A													
	Chloride	16887-00-6	4.91	0.24	mg/l	---	517	12.0	mg/l	---	3.81	0.12	mg/l	---
	Sulfate	14808-79-8	ND	0.60	mg/l	---	166	60.0	mg/l	---	43.6	1.80	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	621	5.0	mg/l	---	80.9	5.0	mg/l	---	185	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	621	5.0	mg/l	---	ND	5.0	mg/l	---	185	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163526-1

		Sample Name:	RW10A (75-85)-082818				RW10 (120-130)-082818				RW10 (185-195)-082818			
		Lab Sample ID:	4601635264				4601635265				4601635266			
		Sample Date:	8/28/2018				8/28/2018				8/28/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Hexanol, 2-ethyl- - TIC	104-76-7												
1-Propene, 2-methyl- - TIC	115-11-7												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	4.7	5.0	ug/l	J	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	56	5.0	ug/l	---	22	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	0.38	1.0	ug/l	J	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	0.48	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163526-1

		Sample Name:	RW10A (75-85)-082818				RW10 (120-130)-082818				RW10 (185-195)-082818			
		Lab Sample ID:	4601635264				4601635265				4601635266			
		Sample Date:	8/28/2018				8/28/2018				8/28/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC													
OSW-8270D													
1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzenesulfonamide, N-butyl- - TIC	3622-84-2												
Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	UJ	ND	10	ug/l	UJ	ND	10	ug/l	UJ
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyltoluamide - TIC	134-62-3												
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5												
Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Phenol	108-95-2	ND	10	ug/l	---	7.7	10	ug/l	J	2.0	10	ug/l	J
Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Unknown - TIC	Tic1												
Unknown - TIC	Tic2												
Unknown - TIC	Tic3												
Unknown - TIC	Tic4												
Unknown - TIC	Tic5												
Unknown - TIC	Tic6												
Unknown - TIC	Tic7												
Unknown - TIC	Tic8												
Unknown - TIC	Tic9												

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163526-1

		Sample Name:	RW10A (75-85)-082818				RW10 (120-130)-082818				RW10 (185-195)-082818			
		Lab Sample ID:	4601635264				4601635265				4601635266			
		Sample Date:	8/28/2018				8/28/2018				8/28/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	0.11	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	0.063	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	0.17	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	0.070	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	67.3	40.0	ug/l	---	107	40.0	ug/l	---	85.9	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	79.4	40.0	ug/l	---	79.3	40.0	ug/l	---
	Antimony	7440-36-0	ND	2.0	ug/l	---	0.86	2.0	ug/l	J	ND	2.0	ug/l	---
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	8.1	2.0	ug/l	---	3.9	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	7.5	2.0	ug/l	---	5.3	2.0	ug/l	---
	Barium	7440-39-3	6.3	4.0	ug/l	---	13.6	4.0	ug/l	---	9.4	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	6.1	4.0	ug/l	---	13.1	4.0	ug/l	---	9.7	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	48500	200	ug/l	---	45600	200	ug/l	---	48200	200	ug/l	---
	Calcium - Dissolved	7440-70-2	48400	200	ug/l	---	45100	200	ug/l	---	48200	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	2.6	4.0	ug/l	J	4.2	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	105	120	ug/l	J	109	120	ug/l	J	ND	120	ug/l	---
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	1.1	1.2	ug/l	J	1.2	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	15300	200	ug/l	---	ND	200	ug/l	---	1310	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	13800	200	ug/l	---	ND	200	ug/l	---	973	200	ug/l	---
	Manganese	7439-96-5	14.3	8.0	ug/l	---	ND	8.0	ug/l	---	ND	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	ND	8.0	ug/l	---	ND	8.0	ug/l	---	ND	8.0	ug/l	---
	Nickel	7440-02-0	1.3	4.0	ug/l	J	9.1	4.0	ug/l	---	1.5	4.0	ug/l	J
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	8.3	4.0	ug/l	---	1.5	4.0	ug/l	J
	Potassium	7440-09-7	2040	200	ug/l	---	19900	200	ug/l	---	7940	200	ug/l	---
	Potassium - Dissolved	7440-09-7	2010	200	ug/l	---	20000	200	ug/l	---	8750	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	2.1	10.0	ug/l	J	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	3.2	10.0	ug/l	J	0.81	10.0	ug/l	J
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	5570	200	ug/l	---	69500	200	ug/l	---	25300	200	ug/l	---
	Sodium - Dissolved	7440-23-5	5040	200	ug/l	---	63800	200	ug/l	---	27000	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	5.1	4.0	ug/l	---	1.7	4.0	ug/l	J
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	5.6	4.0	ug/l	---	1.7	4.0	ug/l	J
	Zinc	7440-66-6	ND	16.0	ug/l	---	5.7	16.0	ug/l	J	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163526-1

		Sample Name:	RW10A (75-85)-082818				RW10 (120-130)-082818				RW10 (185-195)-082818			
		Lab Sample ID:	4601635264				4601635265				4601635266			
		Sample Date:	8/28/2018				8/28/2018				8/28/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
General Chemistry													
OSW-9012B													
Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
OSW-9056A													
Chloride	16887-00-6	3.23	0.12	mg/l	---	8.76	1.20	mg/l	---	4.80	0.12	mg/l	---
Sulfate	14808-79-8	36.9	1.80	mg/l	---	133	6.00	mg/l	---	104	4.80	mg/l	---
Prep													
APHA-2320B													
Alkalinity	E-14506	148	5.0	mg/l	---	114	5.0	mg/l	---	70.0	5.0	mg/l	---
Bicarbonate Alkalinity as CaCO3	E-14508	148	5.0	mg/l	---	ND	5.0	mg/l	---	ND	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163526-1

		Sample Name:	RW12 (55-65)-082918				RW12 (130-140)-082918				TB-04-082918			
		Lab Sample ID:	4601635267				4601635268				4601635269			
		Sample Date:	8/29/2018				8/29/2018				8/29/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Hexanol, 2-ethyl- - TIC	104-76-7	10	---	ug/l	NJ								
1-Propene, 2-methyl- - TIC	115-11-7												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	14	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	1.9	1.0	ug/l	---	2.8	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	1.7	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	0.0033	0.030	ug/l	J	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163526-1

		Sample Name:	RW12 (55-65)-082918				RW12 (130-140)-082918				TB-04-082918			
		Lab Sample ID:	4601635267				4601635268				4601635269			
		Sample Date:	8/29/2018				8/29/2018				8/29/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---				
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---				
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---				
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---				
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---				
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---				
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---				
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---				
	2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---				
	2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---				
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	UJ				
	2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---				
	2-Methylphenol	95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	UJ				
	2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---				
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---				
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---				
	3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---				
	4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---				
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---				
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---				
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---				
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---				
	4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---				
	4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---				
	4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---				
	Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---				
	Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---				
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---				
	Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---				
	Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---				
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2	14	---	ug/l	NJ								
	Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---				
	Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---				
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---				
	Caprolactam	105-60-2	ND	10	ug/l	UJ	ND	10	ug/l	---				
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---				
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---				
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---				
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---				
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---				
	Diethyltoluamide - TIC	134-62-3												
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---				
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5	42	---	ug/l	NJ								
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---				
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---				
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	---				
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---				
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Isophorone	78-59-1	1.2	10	ug/l	J	ND	10	ug/l	---				
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---				
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---				
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---				
	Phenol	108-95-2	7.5	10	ug/l	J	0.75	10	ug/l	J				
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---				
	Unknown - TIC	Tic1	7.9	---	ug/l	NJ	7.2	---	ug/l	NJ				
	Unknown - TIC	Tic2	9.2	---	ug/l	NJ								
	Unknown - TIC	Tic3	14	---	ug/l	NJ								
	Unknown - TIC	Tic4	7.9	---	ug/l	NJ								
	Unknown - TIC	Tic5	34	---	ug/l	NJ								
	Unknown - TIC	Tic6	13	---	ug/l	NJ								
	Unknown - TIC	Tic7	7.5	---	ug/l	NJ								
	Unknown - TIC	Tic8	9.0	---	ug/l	NJ								
	Unknown - TIC	Tic9	6.7	---	ug/l	NJ								

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163526-1

		Sample Name:	RW12 (55-65)-082918				RW12 (130-140)-082918				TB-04-082918			
		Lab Sample ID:	4601635267				4601635268				4601635269			
		Sample Date:	8/29/2018				8/29/2018				8/29/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---				
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---				
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---				
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---				
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---				
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---				
Metals														
OSW-6020B														
	Aluminum	7429-90-5	173	40.0	ug/l	---	413	40.0	ug/l	---				
	Aluminum - Dissolved	7429-90-5	152	40.0	ug/l	---	124	40.0	ug/l	---				
	Antimony	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Arsenic	7440-38-2	14.8	2.0	ug/l	---	5.6	2.0	ug/l	---				
	Arsenic - Dissolved	7440-38-2	16.0	2.0	ug/l	---	5.7	2.0	ug/l	---				
	Barium	7440-39-3	21.6	4.0	ug/l	---	11.9	4.0	ug/l	---				
	Barium - Dissolved	7440-39-3	20.6	4.0	ug/l	---	6.4	4.0	ug/l	---				
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Calcium	7440-70-2	52900	200	ug/l	---	23500	200	ug/l	---				
	Calcium - Dissolved	7440-70-2	51100	200	ug/l	---	21000	200	ug/l	---				
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Copper	7440-50-8	ND	4.0	ug/l	---	3.5	4.0	ug/l	J				
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Iron	7439-89-6	ND	120	ug/l	---	475	120	ug/l	---				
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---				
	Lead	7439-92-1	0.57	1.2	ug/l	J	0.93	1.2	ug/l	J				
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---				
	Magnesium	7439-95-4	412	200	ug/l	---	492	200	ug/l	---				
	Magnesium - Dissolved	7439-95-4	893	200	ug/l	---	99.3	200	ug/l	J				
	Manganese	7439-96-5	ND	8.0	ug/l	---	12.2	8.0	ug/l	---				
	Manganese - Dissolved	7439-96-5	ND	8.0	ug/l	---	ND	8.0	ug/l	---				
	Nickel	7440-02-0	2.3	4.0	ug/l	J	31.6	4.0	ug/l	---				
	Nickel - Dissolved	7440-02-0	1.5	4.0	ug/l	J	7.8	4.0	ug/l	---				
	Potassium	7440-09-7	15300	200	ug/l	---	10100	200	ug/l	---				
	Potassium - Dissolved	7440-09-7	14100	200	ug/l	---	9570	200	ug/l	---				
	Selenium	7782-49-2	3.1	10.0	ug/l	J	ND	10.0	ug/l	---				
	Selenium - Dissolved	7782-49-2	4.7	10.0	ug/l	J	1.3	10.0	ug/l	J				
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Sodium	7440-23-5	152000	200	ug/l	---	29700	200	ug/l	---				
	Sodium - Dissolved	7440-23-5	128000	200	ug/l	---	27400	200	ug/l	---				
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Vanadium	7440-62-2	2.3	4.0	ug/l	J	ND	4.0	ug/l	---				
	Vanadium - Dissolved	7440-62-2	1.8	4.0	ug/l	J	ND	4.0	ug/l	---				
	Zinc	7440-66-6	ND	16.0	ug/l	---	29.5	16.0	ug/l	---				
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---				
OSW-7470A														
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---				
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163526-1

		Sample Name:	RW12 (55-65)-082918				RW12 (130-140)-082918				TB-04-082918			
		Lab Sample ID:	4601635267				4601635268				4601635269			
		Sample Date:	8/29/2018				8/29/2018				8/29/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---				
	OSW-9056A													
	Chloride	16887-00-6	43.6	2.28	mg/l	---	3.56	0.12	mg/l	---				
	Sulfate	14808-79-8	266	11.4	mg/l	---	25.5	0.60	mg/l	---				
Prep														
	APHA-2320B													
	Alkalinity	E-14506	77.7	5.0	mg/l	---	99.9	5.0	mg/l	---				
	Bicarbonate Alkalinity as CaCO3	E-14508	15.5	5.0	mg/l	---	ND	5.0	mg/l	---				

September 14, 2018

Tim Roeper
Cornerstone EG
100 Crystal Run Road
Suite 101
Middletown, NY 10941

CADENA project ID: E203361
Project: Ford Ringwood Mines Project
Project number:
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: TestAmerica - Edison
Laboratory submittal: 163634-1
Sample date: 2018-08-29
Report received by CADENA: 2018-09-14
Initial Data Verification completed by CADENA: 2018-09-14

The following minor QC exceptions or missing information were noted:

LCS - LCS recoveries were outliers biased LOW for these analytes (or one LCS and the associated LCS/LCSD RPD). The listed client sample results should be considered to be estimated and qualified with J flags if detected or UJ flags if non-detect: .
GCMS VOC QC batch 549256 - BROMOMETHANE - UJ flag - sample -001.
GCMS SVOC QC batch 549018 - 2,2-oxybis(1-chloropropane) - UJ flags - sample -001, -002, -003, -004.

TIC - Tentatively Identified Compounds (TIC's) detections reported for samples noted should all be considered to be estimated and qualified with NJ flags.
GCMS VOC
GCMS SVOC

MSD - MS and MSD recovery outliers or one recovery and the MS/MSD RPD were outliers with the recovery biased HIGH for these analytes. Results for the client sample spiked only should be considered to be estimated and qualified with a J flag if detected for these analytes (non-detect results are not affected by this high bias):
ANIONS -sample -001 - CHLORIDE - J flag.

GCMS VOC, GCMS SVOC, GCMS SVOC-SIM, VOC-SIM Analytical batch CCV STANDARD response outliers as noted in the laboratory submittal case narrative were not used to qualify client sample results as part of this level 2 data package verification review.

LCS recoveries were outliers biased HIGH for these tests and analytes (or one LCS and the associated LCS/LCSD RPD). All associated client sample results were non-detect for these analytes so were not affected by the high bias and qualification was not required:
GCMS SVOC QC batch 549018 - ATRAZINE
GCMS SVOC-SIM QC batch 549018 - DIBENZO(AH)ANTHRACENE, INDENO(123CD)PYRENE.

SURROGATE recoveries were outside of laboratory control limits biased HIGH for only 1 fraction specific surrogate so qualification of client sample results noted below were not requried based on this QC outlier alone:
GCMS SVOC ACID FRACTION 1 out of 3 surrogates biased high - samples -001, -002, -003, -004, LCS and MBLK QC batch 549018.

MS/MSD recovery outliers or sample duplicate RPD outliers were not determined using a client sample from this submittal for the test and QC batch noted so qualification was not required based on these sample-specific QC outliers:
GCMS SVOC QC batch 549018
DISSOLVED METALS QC batch 551569 - MS RECOVERY and DUPLICATE RPD
TOTAL METALS QC batch 550921.

METHOD BLANKS had detections BELOW the Reporting Limit (RL) as noted below. Client sample results were either non-detect for these analytes or had concentrations greater than 5X the method blank levels so qualification of client sample results was not required:
GCMS VOC-SIM QC batch 550312 - 1,2,3-TRICHLOROPROPANE.

MS/MSD spike concentrations were less than 4X the original sample concentration for the following analytes in the client sample noted so MS/MSD percent recoveries are not considered to be statistically reliable and were not used to qualify client sample results:
ANIONS sample -001 - SULFATE.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

4 Water sample(s) were analyzed for GCMS VOC, GCMS SVOC, GC Other, Metals, General Chemistry and MISC parameter(s). 1 Trip blank was analyzed for GCMS VOC parameters.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, LCS/LCD RPD, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Edison
Laboratory Submittal: 163634-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	METALS BY ICPMS(D)	METALS BY ICPMS	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE (AUTOMATED COLORIMETRIC, WITH OFF-LINE	Inorganic Anions by IC	Alkalinity Prep
4601636341	RW8(163-173)-082918	8/29/2018	11:00:00	X	X	X	X	X	X	X	X	X	X	X	X
4601636342	RW8(204-214)-082918	8/29/2018	11:30:00	X	X	X	X	X	X	X	X	X	X	X	X
4601636343	RW9A(85-95)-082918	8/29/2018	2:20:00	X	X	X	X	X	X	X	X	X	X	X	X
4601636344	RW9(206-216)-082918	8/29/2018	3:30:00	X	X	X	X	X	X	X	X	X	X	X	X
4601636345	TB-05-083018	8/30/2018	12:00:00	X	X										

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163634-1

		Sample Name:	RW8(163-173)-082918				RW8(204-214)-082918				RW9(206-216)-082918			
		Lab Sample ID:	4601636341				4601636342				4601636344			
		Sample Date:	8/29/2018				8/29/2018				8/29/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
	OSW-8260C													
	1-Propene, 2-methyl- - TIC	115-11-7									12	---	ug/l	NJ
	Bromomethane	74-83-9	ND	1.0	ug/l	UJ								
	Unknown - TIC	Tic1					33	---	ug/l	NJ	40	---	ug/l	NJ
GC/MS SVOC														
	OSW-8270D													
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC	82304-66-3					6.8	---	ug/l	NJ	6.9	---	ug/l	NJ
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2					42	---	ug/l	NJ	15	---	ug/l	NJ
	Unknown - TIC	Tic1					43	---	ug/l	NJ				
General Chemistry														
	OSW-9056A													
	Chloride	16887-00-6	5.90	1.20	mg/l	J								

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163634-1

		Sample Name:	RW8(163-173)-082918				RW8(204-214)-082918				RW9A(85-95)-082918			
		Lab Sample ID:	4601636341				4601636342				4601636343			
		Sample Date:	8/29/2018				8/29/2018				8/29/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Propene, 2-methyl- - TIC	115-11-7												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	5.1	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	5.3	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	1.4	1.0	ug/l	---	2.8	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	UJ	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	1.1	1.0	ug/l	---	1.0	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	0.35	1.0	ug/l	J	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	0.81	1.0	ug/l	J	0.39	1.0	ug/l	J	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic1					33	---	ug/l	NJ				
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163634-1

		Sample Name:	RW8(163-173)-082918				RW8(204-214)-082918				RW9A(85-95)-082918			
		Lab Sample ID:	4601636341				4601636342				4601636343			
		Sample Date:	8/29/2018				8/29/2018				8/29/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC	82304-66-3					6.8	---	ug/l	NJ				
	Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2					42	---	ug/l	NJ				
	Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	0.65	10	ug/l	J	ND	10	ug/l	---
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Unknown - TIC	Tic1					43	---	ug/l	NJ				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163634-1

		Sample Name:	RW8(163-173)-082918				RW8(204-214)-082918				RW9A(85-95)-082918			
		Lab Sample ID:	4601636341				4601636342				4601636343			
		Sample Date:	8/29/2018				8/29/2018				8/29/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	0.44	0.20	ug/l	---	ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1221	11104-28-2	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1232	11141-16-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1242	53469-21-9	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1248	12672-29-6	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1254	11097-69-1	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1260	11096-82-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1262	37324-23-5	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	PCB-1268	11100-14-4	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---	ND	0.40	ug/l	---	ND	0.40	ug/l	---
Metals														
OSW-6020B														
	Aluminum	7429-90-5	ND	40.0	ug/l	---	20.6	40.0	ug/l	J	37.6	40.0	ug/l	J
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	0.96	2.0	ug/l	J	1.1	2.0	ug/l	J	1.4	2.0	ug/l	J
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	1.8	2.0	ug/l	J	1.8	2.0	ug/l	J	2.6	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	1.1	2.0	ug/l	J	1.7	2.0	ug/l	J	2.6	2.0	ug/l	---
	Barium	7440-39-3	9.2	4.0	ug/l	---	15.7	4.0	ug/l	---	10.0	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	8.5	4.0	ug/l	---	16.4	4.0	ug/l	---	9.2	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	31900	200	ug/l	---	36300	200	ug/l	---	23900	200	ug/l	---
	Calcium - Dissolved	7440-70-2	33000	200	ug/l	---	36900	200	ug/l	---	23000	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	3.5	4.0	ug/l	J	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	ND	4.0	ug/l	---	4.3	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	77.1	120	ug/l	J	353	120	ug/l	---	258	120	ug/l	---
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	ND	1.2	ug/l	---	2.1	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	6610	200	ug/l	---	15400	200	ug/l	---	5800	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	6940	200	ug/l	---	17200	200	ug/l	---	5530	200	ug/l	---
	Manganese	7439-96-5	14.2	8.0	ug/l	---	109	8.0	ug/l	---	34.6	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	16.4	8.0	ug/l	---	88.0	8.0	ug/l	---	30.5	8.0	ug/l	---
	Nickel	7440-02-0	7.7	4.0	ug/l	---	6.9	4.0	ug/l	---	6.3	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	4.4	4.0	ug/l	---	8.4	4.0	ug/l	---	13.9	4.0	ug/l	---
	Potassium	7440-09-7	1990	200	ug/l	---	51300	200	ug/l	---	2020	200	ug/l	---
	Potassium - Dissolved	7440-09-7	1980	200	ug/l	---	46800	200	ug/l	---	1930	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	46100	200	ug/l	---	89800	200	ug/l	---	4940	200	ug/l	---
	Sodium - Dissolved	7440-23-5	44400	200	ug/l	---	92000	200	ug/l	---	4680	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	46.1	16.0	ug/l	---	9.4	16.0	ug/l	J
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163634-1

			Sample Name:	RW8(163-173)-082918				RW8(204-214)-082918				RW9A(85-95)-082918			
			Lab Sample ID:	4601636341				4601636342				4601636343			
			Sample Date:	8/29/2018				8/29/2018				8/29/2018			
		Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	OSW-7470A														
		Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
		Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry															
	OSW-9012B														
		Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A														
		Chloride	16887-00-6	5.90	1.20	mg/l	J	47.1	2.40	mg/l	---	1.70	0.12	mg/l	---
		Sulfate	14808-79-8	110	6.00	mg/l	---	102	12.0	mg/l	---	11.9	0.60	mg/l	---
Prep															
	APHA-2320B														
		Alkalinity	E-14506	76.6	5.0	mg/l	---	216	5.0	mg/l	---	77.4	5.0	mg/l	---
		Bicarbonate Alkalinity as CaCO3	E-14508	76.6	5.0	mg/l	---	205	5.0	mg/l	---	77.4	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163634-1

		Sample Name:	RW9(206-216)-082918				TB-05-083018			
		Lab Sample ID:	4601636344				4601636345			
		Sample Date:	8/29/2018				8/30/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC									
OSW-8260C									
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Propene, 2-methyl- - TIC	115-11-7	12	---	ug/l	NJ				
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	5.6	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	5.8	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	0.41	1.0	ug/l	J	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	1.1	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Unknown - TIC	Tic1	40	---	ug/l	NJ				
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM									
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163634-1

		Sample Name:	RW9(206-216)-082918				TB-05-083018			
		Lab Sample ID:	4601636344				4601636345			
		Sample Date:	8/29/2018				8/30/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC										
OSW-8270D										
	1,1'-Biphenyl	92-52-4	ND	10	ug/l	---				
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---				
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---				
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---				
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---				
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---				
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---				
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---				
	2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---				
	2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---				
	2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---				
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---				
	2-Chlorophenol	95-57-8	ND	10	ug/l	---				
	2-Methylnaphthalene	91-57-6	ND	10	ug/l	---				
	2-Methylphenol	95-48-7	ND	10	ug/l	---				
	2-Nitroaniline	88-74-4	ND	10	ug/l	---				
	2-Nitrophenol	88-75-5	ND	10	ug/l	---				
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---				
	3-Nitroaniline	99-09-2	ND	10	ug/l	---				
	4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---				
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---				
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---				
	4-Chloroaniline	106-47-8	ND	10	ug/l	---				
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---				
	4-Methylphenol	106-44-5	ND	10	ug/l	---				
	4-Nitroaniline	100-01-6	ND	10	ug/l	---				
	4-Nitrophenol	100-02-7	ND	20	ug/l	---				
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC	82304-66-3	6.9	---	ug/l	NJ				
	Acenaphthene	83-32-9	ND	10	ug/l	---				
	Acenaphthylene	208-96-8	ND	10	ug/l	---				
	Acetophenone	98-86-2	ND	10	ug/l	---				
	Anthracene	120-12-7	ND	10	ug/l	---				
	Atrazine	1912-24-9	ND	2.0	ug/l	---				
	Benzaldehyde	100-52-7	ND	10	ug/l	---				
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2	15	---	ug/l	NJ				
	Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---				
	Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---				
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---				
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---				
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---				
	Caprolactam	105-60-2	ND	10	ug/l	---				
	Carbazole	86-74-8	ND	10	ug/l	---				
	Chrysene	218-01-9	ND	2.0	ug/l	---				
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---				
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---				
	Dibenzofuran	132-64-9	ND	10	ug/l	---				
	Diethyl phthalate	84-66-2	ND	10	ug/l	---				
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---				
	Fluoranthene	206-44-0	ND	10	ug/l	---				
	Fluorene	86-73-7	ND	10	ug/l	---				
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---				
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---				
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---				
	Isophorone	78-59-1	ND	10	ug/l	---				
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---				
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---				
	Naphthalene	91-20-3	ND	10	ug/l	---				
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---				
	Phenanthrene	85-01-8	ND	10	ug/l	---				
	Phenol	108-95-2	ND	10	ug/l	---				
	Pyrene	129-00-0	ND	10	ug/l	---				
	Unknown - TIC	Tic1								

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163634-1

		Sample Name:	RW9(206-216)-082918				TB-05-083018			
		Lab Sample ID:	4601636344				4601636345			
		Sample Date:	8/29/2018				8/30/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	OSW-8270DSIM									
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---				
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---				
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---				
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---				
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---				
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---				
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---				
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---				
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---				
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---				
GC Other										
	OSW-8082A									
	PCB-1016	12674-11-2	ND	0.40	ug/l	---				
	PCB-1221	11104-28-2	ND	0.40	ug/l	---				
	PCB-1232	11141-16-5	ND	0.40	ug/l	---				
	PCB-1242	53469-21-9	ND	0.40	ug/l	---				
	PCB-1248	12672-29-6	ND	0.40	ug/l	---				
	PCB-1254	11097-69-1	ND	0.40	ug/l	---				
	PCB-1260	11096-82-5	ND	0.40	ug/l	---				
	PCB-1262	37324-23-5	ND	0.40	ug/l	---				
	PCB-1268	11100-14-4	ND	0.40	ug/l	---				
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.40	ug/l	---				
Metals										
	OSW-6020B									
	Aluminum	7429-90-5	224	40.0	ug/l	---				
	Aluminum - Dissolved	7429-90-5	178	40.0	ug/l	---				
	Antimony	7440-36-0	1.4	2.0	ug/l	J				
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---				
	Arsenic	7440-38-2	2.5	2.0	ug/l	---				
	Arsenic - Dissolved	7440-38-2	2.2	2.0	ug/l	---				
	Barium	7440-39-3	52.3	4.0	ug/l	---				
	Barium - Dissolved	7440-39-3	62.6	4.0	ug/l	---				
	Beryllium	7440-41-7	ND	0.80	ug/l	---				
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---				
	Cadmium	7440-43-9	ND	2.0	ug/l	---				
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---				
	Calcium	7440-70-2	71100	200	ug/l	---				
	Calcium - Dissolved	7440-70-2	65300	200	ug/l	---				
	Chromium	7440-47-3	ND	4.0	ug/l	---				
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---				
	Cobalt	7440-48-4	ND	4.0	ug/l	---				
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---				
	Copper	7440-50-8	7.8	4.0	ug/l	---				
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---				
	Iron	7439-89-6	278	120	ug/l	---				
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---				
	Lead	7439-92-1	ND	1.2	ug/l	---				
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---				
	Magnesium	7439-95-4	16600	200	ug/l	---				
	Magnesium - Dissolved	7439-95-4	17000	200	ug/l	---				
	Manganese	7439-96-5	177	8.0	ug/l	---				
	Manganese - Dissolved	7439-96-5	86.6	8.0	ug/l	---				
	Nickel	7440-02-0	ND	4.0	ug/l	---				
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---				
	Potassium	7440-09-7	14300	200	ug/l	---				
	Potassium - Dissolved	7440-09-7	18100	200	ug/l	---				
	Selenium	7782-49-2	ND	10.0	ug/l	---				
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---				
	Silver	7440-22-4	ND	2.0	ug/l	---				
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---				
	Sodium	7440-23-5	145000	200	ug/l	---				
	Sodium - Dissolved	7440-23-5	152000	200	ug/l	---				
	Thallium	7440-28-0	ND	0.80	ug/l	---				
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---				
	Vanadium	7440-62-2	ND	4.0	ug/l	---				
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---				
	Zinc	7440-66-6	8.9	16.0	ug/l	J				
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163634-1

		Sample Name:	RW9(206-216)-082918				TB-05-083018			
		Lab Sample ID:	4601636344				4601636345			
		Sample Date:	8/29/2018				8/30/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	OSW-7470A									
	Mercury	7439-97-6	ND	0.20	ug/l	---				
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---				
General Chemistry										
	OSW-9012B									
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---				
	OSW-9056A									
	Chloride	16887-00-6	7.46	0.60	mg/l	---				
	Sulfate	14808-79-8	377	24.0	mg/l	---				
Prep										
	APHA-2320B									
	Alkalinity	E-14506	125	5.0	mg/l	---				
	Bicarbonate Alkalinity as CaCO3	E-14508	101	5.0	mg/l	---				

September 18, 2018

Tim Roeper
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CADENA project ID: E203361
Project: Ford Ringwood Mines Project
Project number:
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: TestAmerica - Edison
Laboratory submittal: 163741-1
Sample date: 2018-08-31 2018-08-30
Report received by CADENA: 2018-09-18
Initial Data Verification completed by CADENA: 2018-09-18

The following significant QC anomalies were identified during verification of the analytical report:

LCS - LCS results recovered less than 10% or did not recover for these analytes . Client sample non-detect results are considered to be unusable and have been qualified with R flags. Detected analyte results are considered to be estimated and qualified with J flags:
GCMS SVOC QC batch 549338 - CAPROLACTAM - R flags - samples -001, -002, -003, -005, -006.

The following minor QC exceptions or missing information were noted:

TIC - Tentatively Identified Compounds (TIC's) detections reported for samples noted should all be considered to be estimated and qualified with NJ flags.
GCMS VOC
GCMS SVOC

LCS - LCS recoveries were outliers biased LOW for these analytes (or one LCS and the associated LCS/LCSD RPD). The listed client sample results should be considered to be estimated and qualified with J flags if detected or UJ flags if non-detect: .
GCMS SVOC QC batch 549338 - ATRAZINE - UJ flags - samples -001, -002, -003, -005, -006.
GCMS SVOC QC batch 549397 - HEXACHLOROBUTADIENE - UJ flags - samples -007 through -016 and -018.
GCMS SVOC QC batch 549791 - 2,2-OXYBIS(1-CHLOROPROPANE) and 2-METHYLPHENOL - UJ flags - sample -004.

MSD - MS and MSD recovery outliers or one recovery and the MS/MSD RPD were outliers with the recovery biased LOW for these analytes. Results for the client sample spiked only should be considered to be estimated and qualified with a J flag if detected and UJ flags if non-detect for these analytes:
GCMS SVOC sample -003 - UJ flag - 2-METHYLPHENOL.
METALS sample -003 - UJ flag - SELENIUM.

MBK - METHOD BLANKS had detections BELOW the Reporting Limit (RL) for these analytes. The listed client sample results had concentrations LESS than 5X the method blank levels so client sample results reported below the RL are considered non-detect at the RL and qualified with UB flags and results greater than the RL are non-detect at the sample concentration reported and qualified with B flags :
TOTAL METALS QC batch 550528 - TOTAL LEAD - UB flags - samples -001, -002, -004, -009, -010, -015, -016, -018.

GCMS VOC, GCMS VOC-SIM, GCMS SVOC, GCMS SVOC-SIM CCV STANDARD response outliers as noted in the laboratory submittal case narrative were not used to qualify client sample results as part of this level 2 data package verification review.

LCS or LCSD recoveries but not both or LCS/LCSD RPD only were outliers so client sample results were not qualified based on these QC outliers alone:
GCMS SVOC QC batch 549338 - DINOCTYLPHTHALATE.
GCMS SVOC QC batch 549397 - ATRAZINE
GCMS SVOC QC batch 549791 - 3,3-DICHLOROBENZIDINE
GCMS SVOC-SIM QC batch 549338 - DIBENZO(AH)ANTHRACENE
GCMS SVOC-SIM QC batch 549397 - BIS2CHLOROETHYLETHER, HEXACHLOROBENZENE

LCS recoveries were outliers biased HIGH for these tests and analytes (or one LCS and the associated LCS/LCSD RPD). All associated client sample results were non-detect for these analytes so were not affected by the high bias and qualification was not required:
GCMS SVOC QC batch 549397 - 2,4-DINITROPHENOL.
GCMS SVOC-SIM QC batch 549338 - HEXACHLOROBENZENE, INDENO(123CD)PYRENE, PENTACHLOROPHENOL.

SURROGATE recoveries were outside of laboratory control limits biased low but greater than 10% for only 1 of 3 acid fraction surrogate so qualification of client sample results noted below were not required based on this QC outlier alone:
GCMS SVOC - samples -001, -002, -003, -003MS, -003MSD, -005, -006, -008, -010, -011, LCS for QC batches 549338 and 549397, METHOD BLANK for QC batch 249338.

MS or MSD recoveries but not both or RPD only were outliers for the following analytes so results for the client sample spiked were not qualified based on these QC outliers alone:
GCMS SVOC sample -003 - ATRAZINE
PCB sample -003 - aroclor 1016 and 1260 - RPD only

MS and MSD recovery outliers or one recovery and the MS/MSD RPD were outliers with the recovery biased HIGH for these analytes. Client sample results spiked as noted below were non-detect so qualification was not required based on these high bias QC outliers:
GCMS SVOC sample -003 - DINOCTYLPHTHALATE.

MS/MSD spike concentrations were less than 4X the original sample concentration for the following analytes in the client sample noted so MS/MSD percent recoveries are not considered to be statistically reliable and were not used to qualify client sample results:
DISSOLVED AND TOTAL METALS sample -003 - SODIUM, MAGNESIUM, CALCIUM.
ANIONS sample -003 and -010 - CHLORIDE and SULFATE.

Sample result for test and analyte noted below were NOT QUALIFIED based on low level concentration criteria (sample result less than 5X the lab RL so absolute difference between replicate values must be less than 2X RL for soil and less than 1X RL for water), even though laboratory report indicated duplicate RPD was an outlier based on high level criteria (laboratory RPD control limit):
TOTAL METALS sample -003 - ARSENIC.

Tentatively Identified Compound (TIC) QC batch blank had detections for these analytes. Qualification of client sample TIC detections was not required based on the TIC blanks noted below:
GCMS SVOC QC batch 549338 - EICOSANE Retention Time 14.80 tentative concentration 6.73J ug/l.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

15 Water sample(s), 1 field duplicate, 1 field blank were analyzed for GCMS VOC, GCMS SVOC, GC Other, Metals, General Chemistry and MISC parameter(s). 1 Trip blank was analyzed for GCMS VOC parameters.

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, LCS/LCD RPD, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Inc, 1099 Highland Drive, Suite E, Ann Arbor, MI 48108 517-819-0356

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361
Laboratory: TestAmerica-Edison
Laboratory Submittal: 163741-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles	GCMS VOC SIM	OSW-8270D	GCMS SVOC SIM	OSW-8082A	METALS BY ICPMS(D)	METALS BY ICPMS	Mercury (Manual Cold Vapor)(D)	Mercury (Manual Cold Vapor)	TOTAL AND AMENABLE (AUTOMATED COLORIMETRIC, WITH OFF-LINE DISTILLATION)	Inorganic Anions by IC	Alkalinity Prep
4601637411	RW-11S(236-241)-083118	8/31/2018	10:30:00	X	X	X	X	X	X	X	X	X	X	X	X
46016374110	RW-13(100-120)-083018	8/30/2018	12:20:00	X	X	X	X	X	X	X	X	X	X	X	X
46016374111	RW-3DS(155-160)-083018	8/30/2018	1:00:00	X	X	X	X	X	X	X	X	X	X	X	X
46016374112	RW-3DD(175-180)-083018	8/30/2018	12:30:00	X	X	X	X	X	X	X	X	X	X	X	X
46016374113	RW-3(77-87)-083018	8/30/2018	1:35:00	X	X	X	X	X	X	X	X	X	X	X	X
46016374114	RW-4(333-343)-083018	8/30/2018	3:50:00	X	X	X	X	X	X	X	X	X	X	X	X
46016374115	RW-4(393-403)-083018	8/30/2018	3:20:00	X	X	X	X	X	X	X	X	X	X	X	X
46016374116	RW-4A(62-72)-083018	8/30/2018	2:20:00	X	X	X	X	X	X	X	X	X	X	X	X
46016374117	TB-06-083118	8/31/2018	12:00:00	X	X										
46016374118	RW-4A-(113-123)-083018	8/31/2018	2:45:00	X	X	X	X	X	X	X	X	X	X	X	X
4601637412	RW-11D(262-267)-083118	8/31/2018	10:15:00	X	X	X	X	X	X	X	X	X	X	X	X
4601637413	RW-14S(135-155)-083118	8/31/2018	12:15:00	X	X	X	X	X	X	X	X	X	X	X	X
4601637414	RW-15S(110-120)-083118	8/31/2018	1:20:00	X	X	X	X	X	X	X	X	X	X	X	X
4601637415	RW-15D(127-137)-083118	8/31/2018	2:00:00	X	X	X	X	X	X	X	X	X	X	X	X
4601637416	DUP-04-083118	8/31/2018	12:00:00	X	X	X	X	X	X	X	X	X	X	X	X
4601637417	FB-04-083118	8/31/2018	8:00:00	X	X	X	X	X	X	X	X	X	X	X	X
4601637418	RW-14D(175-185)-083118	8/31/2018	12:40:00	X	X	X	X	X	X	X	X	X	X	X	X
4601637419	RW-13(150-170)-083018	8/30/2018	11:35:00	X	X	X	X	X	X	X	X	X	X	X	X

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

			Sample Name:	RW-11S(236-241)-083118				RW-13(100-120)-083018				RW-3DS(155-160)-083018			
			Lab Sample ID:	4601637411				46016374110				46016374111			
			Sample Date:	8/31/2018				8/30/2018				8/30/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
	OSW-8260C													
	1-Pentanol, 2-ethyl-4-methyl- - TIC	106-67-2					7.0	---	ug/l	NJ				
	1-Propene, 2-methyl- - TIC	115-11-7												
	Ethanethiol - TIC	75-08-1	5.1	---	ug/l	NJ								
GC/MS SVOC														
	OSW-8270D													
	.gamma. Dodecalactone - TIC	2305-05-7					8.0	---	ug/l	NJ				
	1,4-Dioxane - TIC	123-91-1												
	2(3H)-Benzothiazolone - TIC	934-34-9												
	2-Methylphenol	95-48-7												
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC	82304-66-3					20	---	ug/l	NJ				
	Atrazine	1912-24-9	ND	2.0	ug/l	UJ								
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2												
	Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8												
	Benzoic Acid - TIC	65-85-0												
	Caprolactam	105-60-2	ND	10	ug/l	R								
	Cyclic octaatomic sulfur - TIC	10544-50-0												
	Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- - TIC	5989-54-8												
	Diethyltoluamide - TIC	134-62-3					6.8	---	ug/l	NJ				
	Dodecanoic acid - TIC	143-07-7												
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5												
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5					150	---	ug/l	NJ				
	Ethanol, 2-butoxy- - TIC	111-76-2												
	Hexachlorobutadiene	87-68-3					ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	Indolizine - TIC	274-40-8												
	Propanedioic acid, phenyl- - TIC	2613-89-0												
	Sulfur - TIC	13798-23-7												
	Unknown - TIC	TIC1					7.0	---	ug/l	NJ				
	Unknown - TIC	TIC10												
	Unknown - TIC	TIC2					6.4	---	ug/l	NJ				
	Unknown - TIC	TIC3												
	Unknown - TIC	TIC4												
	Unknown - TIC	TIC5												
	Unknown - TIC	TIC6												
	Unknown - TIC	TIC7												
	Unknown - TIC	TIC8												
	Unknown - TIC	TIC9												
	Vanillin - TIC	121-33-5												
Metals														
	OSW-6020B													
	Lead	7439-92-1	0.44	1.2	ug/l	UB	1.1	1.2	ug/l	UB				
	Selenium	7782-49-2												

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-3DD(175-180)-083018				RW-3(77-87)-083018				RW-4(333-343)-083018			
		Lab Sample ID:	46016374112				46016374113				46016374114			
		Sample Date:	8/30/2018				8/30/2018				8/30/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1-Pentanol, 2-ethyl-4-methyl- - TIC	106-67-2												
1-Propene, 2-methyl- - TIC	115-11-7												
Ethanethiol - TIC	75-08-1	9.5	---	ug/l	NJ								
GC/MS SVOC													
OSW-8270D													
.gamma. Dodecalactone - TIC	2305-05-7												
1,4-Dioxane - TIC	123-91-1												
2(3H)-Benzothiazolone - TIC	934-34-9												
2-Methylphenol	95-48-7												
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC	82304-66-3	12	---	ug/l	NJ								
Atrazine	1912-24-9												
Benzenesulfonamide, N-butyl- - TIC	3622-84-2	6.5	---	ug/l	NJ								
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8												
Benzoic Acid - TIC	65-85-0												
Caprolactam	105-60-2												
Cyclic octaatomic sulfur - TIC	10544-50-0												
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- - TIC	5989-54-8												
Diethyltoluamide - TIC	134-62-3												
Dodecanoic acid - TIC	143-07-7												
Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5												
Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5												
Ethanol, 2-butoxy- - TIC	111-76-2												
Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
Indolizine - TIC	274-40-8												
Propanedioic acid, phenyl- - TIC	2613-89-0												
Sulfur - TIC	13798-23-7												
Unknown - TIC	TIC1												
Unknown - TIC	TIC10												
Unknown - TIC	TIC2												
Unknown - TIC	TIC3												
Unknown - TIC	TIC4												
Unknown - TIC	TIC5												
Unknown - TIC	TIC6												
Unknown - TIC	TIC7												
Unknown - TIC	TIC8												
Unknown - TIC	TIC9												
Vanillin - TIC	121-33-5												
Metals													
OSW-6020B													
Lead	7439-92-1												
Selenium	7782-49-2												

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-4(393-403)-083018				RW-4A(62-72)-083018				RW-4A-(113-123)-083018			
		Lab Sample ID:	46016374115				46016374116				46016374118			
		Sample Date:	8/30/2018				8/30/2018				8/31/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
	OSW-8260C													
	1-Pentanol, 2-ethyl-4-methyl- - TIC	106-67-2												
	1-Propene, 2-methyl- - TIC	115-11-7												
	Ethanethiol - TIC	75-08-1												
GC/MS SVOC														
	OSW-8270D													
	.gamma. Dodecalactone - TIC	2305-05-7												
	1,4-Dioxane - TIC	123-91-1												
	2(3H)-Benzothiazolone - TIC	934-34-9												
	2-Methylphenol	95-48-7												
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC	82304-66-3												
	Atrazine	1912-24-9												
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2												
	Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8												
	Benzoic Acid - TIC	65-85-0												
	Caprolactam	105-60-2												
	Cyclic octaatomic sulfur - TIC	10544-50-0												
	Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- - TIC	5989-54-8												
	Diethyltoluamide - TIC	134-62-3												
	Dodecanoic acid - TIC	143-07-7												
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5												
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5												
	Ethanol, 2-butoxy- - TIC	111-76-2												
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	Indolizine - TIC	274-40-8												
	Propanedioic acid, phenyl- - TIC	2613-89-0												
	Sulfur - TIC	13798-23-7												
	Unknown - TIC	TIC1												
	Unknown - TIC	TIC10												
	Unknown - TIC	TIC2												
	Unknown - TIC	TIC3												
	Unknown - TIC	TIC4												
	Unknown - TIC	TIC5												
	Unknown - TIC	TIC6												
	Unknown - TIC	TIC7												
	Unknown - TIC	TIC8												
	Unknown - TIC	TIC9												
	Vanillin - TIC	121-33-5												
Metals														
	OSW-6020B													
	Lead	7439-92-1	0.46	1.2	ug/l	UB	1.6	1.2	ug/l	UB	0.76	1.2	ug/l	UB
	Selenium	7782-49-2												

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-11D(262-267)-083118				RW-14S(135-155)-083118				RW-15S(110-120)-083118			
		Lab Sample ID:	4601637412				4601637413				4601637414			
		Sample Date:	8/31/2018				8/31/2018				8/31/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
	1-Pentanol, 2-ethyl-4-methyl- - TIC	106-67-2												
	1-Propene, 2-methyl- - TIC	115-11-7	9.1	---	ug/l	NJ								
	Ethanethiol - TIC	75-08-1												
GC/MS SVOC														
OSW-8270D														
	.gamma. Dodecalactone - TIC	2305-05-7												
	1,4-Dioxane - TIC	123-91-1	6.4	---	ug/l	NJ								
	2(3H)-Benzothiazolone - TIC	934-34-9	7.1	---	ug/l	NJ								
	2-Methylphenol	95-48-7					ND	10	ug/l	UJ	ND	10	ug/l	UJ
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC	82304-66-3	12	---	ug/l	NJ								
	Atrazine	1912-24-9	ND	2.0	ug/l	UJ	ND	2.0	ug/l	UJ				
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2					3900	---	ug/l	NJ				
	Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8	7.9	---	ug/l	NJ								
	Benzoic Acid - TIC	65-85-0												
	Caprolactam	105-60-2	ND	10	ug/l	R	ND	10	ug/l	R				
	Cyclic octaatomic sulfur - TIC	10544-50-0					37	---	ug/l	NJ				
	Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- - TIC	5989-54-8									11	---	ug/l	NJ
	Diethyltoluamide - TIC	134-62-3	7.2	---	ug/l	NJ								
	Dodecanoic acid - TIC	143-07-7												
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5												
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5									23	---	ug/l	NJ
	Ethanol, 2-butoxy- - TIC	111-76-2												
	Hexachlorobutadiene	87-68-3												
	Indolizine - TIC	274-40-8												
	Propanedioic acid, phenyl- - TIC	2613-89-0												
	Sulfur - TIC	13798-23-7					22	---	ug/l	NJ				
	Unknown - TIC	TIC1	28	---	ug/l	NJ								
	Unknown - TIC	TIC10												
	Unknown - TIC	TIC2												
	Unknown - TIC	TIC3												
	Unknown - TIC	TIC4												
	Unknown - TIC	TIC5												
	Unknown - TIC	TIC6												
	Unknown - TIC	TIC7												
	Unknown - TIC	TIC8												
	Unknown - TIC	TIC9												
	Vanillin - TIC	121-33-5												
Metals														
OSW-6020B														
	Lead	7439-92-1	0.59	1.2	ug/l	UB					0.51	1.2	ug/l	UB
	Selenium	7782-49-2					ND	10.0	ug/l	UJ				

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-15D(127-137)-083118				DUP-04-083118				FB-04-083118			
		Lab Sample ID:	4601637415				4601637416				4601637417			
		Sample Date:	8/31/2018				8/31/2018				8/31/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
	1-Pentanol, 2-ethyl-4-methyl- - TIC	106-67-2												
	1-Propene, 2-methyl- - TIC	115-11-7												
	Ethanethiol - TIC	75-08-1												
GC/MS SVOC														
OSW-8270D														
	.gamma. Dodecalactone - TIC	2305-05-7												
	1,4-Dioxane - TIC	123-91-1												
	2(3H)-Benzothiazolone - TIC	934-34-9												
	2-Methylphenol	95-48-7												
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC	82304-66-3												
	Atrazine	1912-24-9	ND	2.0	ug/l	UJ	ND	2.0	ug/l	UJ				
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2	4100	---	ug/l	NJ								
	Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8												
	Benzoic Acid - TIC	65-85-0	23	---	ug/l	NJ								
	Caprolactam	105-60-2	ND	10	ug/l	R	ND	10	ug/l	R				
	Cyclic octaatomic sulfur - TIC	10544-50-0												
	Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- - TIC	5989-54-8												
	Diethyltoluamide - TIC	134-62-3	7.5	---	ug/l	NJ								
	Dodecanoic acid - TIC	143-07-7	12	---	ug/l	NJ								
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5	68	---	ug/l	NJ								
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5					15	---	ug/l	NJ				
	Ethanol, 2-butoxy- - TIC	111-76-2	21	---	ug/l	NJ								
	Hexachlorobutadiene	87-68-3									ND	1.0	ug/l	UJ
	Indolizine - TIC	274-40-8	6.5	---	ug/l	NJ								
	Propanedioic acid, phenyl- - TIC	2613-89-0	16	---	ug/l	NJ								
	Sulfur - TIC	13798-23-7												
	Unknown - TIC	TIC1	7.3	---	ug/l	NJ								
	Unknown - TIC	TIC10	7.3	---	ug/l	NJ								
	Unknown - TIC	TIC2	6.9	---	ug/l	NJ								
	Unknown - TIC	TIC3	7.7	---	ug/l	NJ								
	Unknown - TIC	TIC4	34	---	ug/l	NJ								
	Unknown - TIC	TIC5	8.9	---	ug/l	NJ								
	Unknown - TIC	TIC6	7.2	---	ug/l	NJ								
	Unknown - TIC	TIC7	12	---	ug/l	NJ								
	Unknown - TIC	TIC8	20	---	ug/l	NJ								
	Unknown - TIC	TIC9	8.1	---	ug/l	NJ								
	Vanillin - TIC	121-33-5	14	---	ug/l	NJ								
Metals														
OSW-6020B														
	Lead	7439-92-1												
	Selenium	7782-49-2												

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-14D(175-185)-083118				RW-13(150-170)-083018			
		Lab Sample ID:	4601637418				4601637419			
		Sample Date:	8/31/2018				8/30/2018			
	Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC										
OSW-8260C										
	1-Pentanol, 2-ethyl-4-methyl- - TIC	106-67-2								
	1-Propene, 2-methyl- - TIC	115-11-7								
	Ethanethiol - TIC	75-08-1								
GC/MS SVOC										
OSW-8270D										
	.gamma. Dodecalactone - TIC	2305-05-7								
	1,4-Dioxane - TIC	123-91-1								
	2(3H)-Benzothiazolone - TIC	934-34-9								
	2-Methylphenol	95-48-7								
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC	82304-66-3								
	Atrazine	1912-24-9								
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2	3400	---	ug/l	NJ				
	Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8								
	Benzoic Acid - TIC	65-85-0								
	Caprolactam	105-60-2								
	Cyclic octaatomic sulfur - TIC	10544-50-0								
	Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- - TIC	5989-54-8								
	Diethyltoluamide - TIC	134-62-3								
	Dodecanoic acid - TIC	143-07-7								
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5								
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5	56	---	ug/l	NJ				
	Ethanol, 2-butoxy- - TIC	111-76-2								
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	Indolizine - TIC	274-40-8								
	Propanedioic acid, phenyl- - TIC	2613-89-0								
	Sulfur - TIC	13798-23-7								
	Unknown - TIC	TIC1	94	---	ug/l	NJ				
	Unknown - TIC	TIC10								
	Unknown - TIC	TIC2	7.3	---	ug/l	NJ				
	Unknown - TIC	TIC3								
	Unknown - TIC	TIC4								
	Unknown - TIC	TIC5								
	Unknown - TIC	TIC6								
	Unknown - TIC	TIC7								
	Unknown - TIC	TIC8								
	Unknown - TIC	TIC9								
	Vanillin - TIC	121-33-5								
Metals										
OSW-6020B										
	Lead	7439-92-1					0.66	1.2	ug/l	UB
	Selenium	7782-49-2								

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-11S(236-241)-083118				RW-13(100-120)-083018				RW-3DS(155-160)-083018			
		Lab Sample ID:	4601637411				46016374110				46016374111			
		Sample Date:	8/31/2018				8/30/2018				8/30/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	2.7	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Pentanol, 2-ethyl-4-methyl- - TIC	106-67-2					7.0	---	ug/l	NJ				
1-Propene, 2-methyl- - TIC	115-11-7												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	14	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	ND	1.0	ug/l	---	1.3	1.0	ug/l	---	17	1.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethanethiol - TIC	75-08-1	5.1	---	ug/l	NJ								
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.44	1.0	ug/l	J
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.33	1.0	ug/l	J
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	0.41	1.0	ug/l	J	0.46	1.0	ug/l	J
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	0.67	2.0	ug/l	J
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-11S(236-241)-083118				RW-13(100-120)-083018				RW-3DS(155-160)-083018			
		Lab Sample ID:	4601637411				46016374110				46016374111			
		Sample Date:	8/31/2018				8/30/2018				8/30/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
	.gamma. Dodecalactone - TIC	2305-05-7					8.0	---	ug/l	NJ				
	1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	1,4-Dioxane - TIC	123-91-1												
	2(3H)-Benzothiazolone - TIC	934-34-9												
	2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC	82304-66-3					20	---	ug/l	NJ				
	Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Atrazine	1912-24-9	ND	2.0	ug/l	UJ	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzenesulfonamide, N-butyl- - TIC	3622-84-2												
	Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8												
	Benzoic Acid - TIC	65-85-0												
	Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Caprolactam	105-60-2	ND	10	ug/l	R	ND	10	ug/l	---	ND	10	ug/l	---
	Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cyclic octaatomic sulfur - TIC	10544-50-0												
	Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- - TIC	5989-54-8												
	Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Diethyltoluamide - TIC	134-62-3					6.8	---	ug/l	NJ				
	Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-11S(236-241)-083118				RW-13(100-120)-083018				RW-3DS(155-160)-083018			
		Lab Sample ID:	4601637411				46016374110				46016374111			
		Sample Date:	8/31/2018				8/30/2018				8/30/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	Dodecanoic acid - TIC	143-07-7												
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5												
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5					150	---	ug/l	NJ				
	Ethanol, 2-butoxy- - TIC	111-76-2												
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Indolizine - TIC	274-40-8												
	Isophorone	78-59-1	ND	10	ug/l	---	0.80	10	ug/l	J	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	2.8	10	ug/l	J	4.4	10	ug/l	J
	Propanedioic acid, phenyl- - TIC	2613-89-0												
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Sulfur - TIC	13798-23-7												
	Unknown - TIC	TIC1					7.0	---	ug/l	NJ				
	Unknown - TIC	TIC10												
	Unknown - TIC	TIC2					6.4	---	ug/l	NJ				
	Unknown - TIC	TIC3												
	Unknown - TIC	TIC4												
	Unknown - TIC	TIC5												
	Unknown - TIC	TIC6												
	Unknown - TIC	TIC7												
	Unknown - TIC	TIC8												
	Unknown - TIC	TIC9												
	Vanillin - TIC	121-33-5												
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	0.90	0.20	ug/l	---	ND	0.20	ug/l	---	12	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1221	11104-28-2	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1232	11141-16-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1242	53469-21-9	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1248	12672-29-6	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1254	11097-69-1	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1260	11096-82-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1262	37324-23-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1268	11100-14-4	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-11S(236-241)-083118				RW-13(100-120)-083018				RW-3DS(155-160)-083018			
		Lab Sample ID:	4601637411				46016374110				46016374111			
		Sample Date:	8/31/2018				8/30/2018				8/30/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
Metals														
	OSW-6020B													
	Aluminum	7429-90-5	84.0	40.0	ug/l	---	2500	40.0	ug/l	---	44.3	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	2600	40.0	ug/l	---	42.0	40.0	ug/l	---
	Antimony	7440-36-0	2.1	2.0	ug/l	---	1.8	2.0	ug/l	J	2.3	2.0	ug/l	---
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	2.7	2.0	ug/l	---	12.4	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	3.6	2.0	ug/l	---	15.7	2.0	ug/l	---
	Barium	7440-39-3	17.9	4.0	ug/l	---	9.0	4.0	ug/l	---	11.3	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	17.2	4.0	ug/l	---	11.5	4.0	ug/l	---	11.3	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	16700	200	ug/l	---	16400	200	ug/l	---	43100	200	ug/l	---
	Calcium - Dissolved	7440-70-2	16400	200	ug/l	---	15400	200	ug/l	---	40000	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	1.3	4.0	ug/l	J	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	8.4	4.0	ug/l	---	2.9	4.0	ug/l	J	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	709	120	ug/l	---	3200	120	ug/l	---	ND	120	ug/l	---
	Iron - Dissolved	7439-89-6	97.9	120	ug/l	J	61.3	120	ug/l	J	ND	120	ug/l	---
	Lead	7439-92-1	0.44	1.2	ug/l	UB	1.1	1.2	ug/l	UB	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	2230	200	ug/l	---	154	200	ug/l	J	ND	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	2240	200	ug/l	---	ND	200	ug/l	---	ND	200	ug/l	---
	Manganese	7439-96-5	504	8.0	ug/l	---	11.6	8.0	ug/l	---	ND	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	525	8.0	ug/l	---	ND	8.0	ug/l	---	ND	8.0	ug/l	---
	Nickel	7440-02-0	11.2	4.0	ug/l	---	15.0	4.0	ug/l	---	3.0	4.0	ug/l	J
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	3.3	4.0	ug/l	J	2.1	4.0	ug/l	J
	Potassium	7440-09-7	1600	200	ug/l	---	81500	200	ug/l	---	32800	200	ug/l	---
	Potassium - Dissolved	7440-09-7	1480	200	ug/l	---	78400	200	ug/l	---	28400	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	4.5	10.0	ug/l	J	2.0	10.0	ug/l	J
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	6.7	10.0	ug/l	J	2.9	10.0	ug/l	J
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	3430	200	ug/l	---	95500	200	ug/l	---	177000	200	ug/l	---
	Sodium - Dissolved	7440-23-5	3380	200	ug/l	---	104000	200	ug/l	---	194000	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	15.7	4.0	ug/l	---	6.4	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	14.5	4.0	ug/l	---	5.7	4.0	ug/l	---
	Zinc	7440-66-6	6.9	16.0	ug/l	J	26.1	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	OSW-7470A													
	Mercury	7439-97-6	2.1	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	1.1	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	0.95	0.12	mg/l	---	20.0	0.96	mg/l	---	31.8	3.12	mg/l	---
	Sulfate	14808-79-8	7.53	0.60	mg/l	---	74.1	4.80	mg/l	---	361	15.6	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	52.7	5.0	mg/l	---	250	5.0	mg/l	---	98.7	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	52.7	5.0	mg/l	---	ND	5.0	mg/l	---	ND	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-3DD(175-180)-083018				RW-3(77-87)-083018				RW-4(333-343)-083018			
		Lab Sample ID:	46016374112				46016374113				46016374114			
		Sample Date:	8/30/2018				8/30/2018				8/30/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Pentanol, 2-ethyl-4-methyl- - TIC	106-67-2												
1-Propene, 2-methyl- - TIC	115-11-7												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	9.2	1.0	ug/l	---	1.1	1.0	ug/l	---	0.76	1.0	ug/l	J
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	1.1	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethanethiol - TIC	75-08-1	9.5	---	ug/l	NJ								
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-3DD(175-180)-083018				RW-3(77-87)-083018				RW-4(333-343)-083018			
		Lab Sample ID:	46016374112				46016374113				46016374114			
		Sample Date:	8/30/2018				8/30/2018				8/30/2018			
				Report		Valid		Report		Valid		Report		Valid
Analyte	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
GC/MS SVOC													
OSW-8270D													
.gamma. Dodecalactone - TIC	2305-05-7												
1,1'-Biphenyl	92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,4-Dioxane - TIC	123-91-1												
2(3H)-Benzothiazolone - TIC	934-34-9												
2,2'-oxybis[1-chloropropane]	108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol	58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol	120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol	105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol	51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene	121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene	606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene	91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol	95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene	91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol	95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitroaniline	88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol	88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine	91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline	99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol	534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether	101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline	106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether	7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol	106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline	100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol	100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC	82304-66-3	12	---	ug/l	NJ								
Acenaphthene	83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene	208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone	98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene	120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine	1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde	100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzenesulfonamide, N-butyl- - TIC	3622-84-2	6.5	---	ug/l	NJ								
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC	80-30-8												
Benzoic Acid - TIC	65-85-0												
Benzo[g,h,i]perylene	191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene	207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate	117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate	85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam	105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Carbazole	86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene	218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cyclic octaatomic sulfur - TIC	10544-50-0												
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- - TIC	5989-54-8												
Di-n-butyl phthalate	84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate	117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran	132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate	84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyltoluamide - TIC	134-62-3												
Dimethyl phthalate	131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-3DD(175-180)-083018				RW-3(77-87)-083018				RW-4(333-343)-083018			
		Lab Sample ID:	46016374112				46016374113				46016374114			
		Sample Date:	8/30/2018				8/30/2018				8/30/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	Dodecanoic acid - TIC	143-07-7												
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5												
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5												
	Ethanol, 2-butoxy- - TIC	111-76-2												
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Indolizine - TIC	274-40-8												
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Propanedioic acid, phenyl- - TIC	2613-89-0												
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Sulfur - TIC	13798-23-7												
	Unknown - TIC	TIC1												
	Unknown - TIC	TIC10												
	Unknown - TIC	TIC2												
	Unknown - TIC	TIC3												
	Unknown - TIC	TIC4												
	Unknown - TIC	TIC5												
	Unknown - TIC	TIC6												
	Unknown - TIC	TIC7												
	Unknown - TIC	TIC8												
	Unknown - TIC	TIC9												
	Vanillin - TIC	121-33-5												
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	12	0.20	ug/l	---	14	0.20	ug/l	---	ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	0.027	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1221	11104-28-2	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1232	11141-16-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1242	53469-21-9	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1248	12672-29-6	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1254	11097-69-1	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1260	11096-82-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1262	37324-23-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	PCB-1268	11100-14-4	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.42	ug/l	---	ND	0.42	ug/l	---	ND	0.42	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

			Sample Name:	RW-3DD(175-180)-083018				RW-3(77-87)-083018				RW-4(333-343)-083018			
			Lab Sample ID:	46016374112				46016374113				46016374114			
			Sample Date:	8/30/2018				8/30/2018				8/30/2018			
					Report		Valid		Report		Valid		Report		Valid
	Analyte	Cas No.		Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
Metals															
	OSW-6020B														
	Aluminum	7429-90-5		132	40.0	ug/l	---	ND	40.0	ug/l	---	790	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5		40.2	40.0	ug/l	---	ND	40.0	ug/l	---	824	40.0	ug/l	---
	Antimony	7440-36-0		2.2	2.0	ug/l	---	1.7	2.0	ug/l	J	1.7	2.0	ug/l	J
	Antimony - Dissolved	7440-36-0		ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2		18.8	2.0	ug/l	---	ND	2.0	ug/l	---	0.82	2.0	ug/l	J
	Arsenic - Dissolved	7440-38-2		17.1	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Barium	7440-39-3		6.9	4.0	ug/l	---	55.3	4.0	ug/l	---	17.3	4.0	ug/l	---
	Barium - Dissolved	7440-39-3		4.1	4.0	ug/l	---	51.4	4.0	ug/l	---	15.9	4.0	ug/l	---
	Beryllium	7440-41-7		ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7		ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9		ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9		ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2		20200	200	ug/l	---	72300	200	ug/l	---	52000	200	ug/l	---
	Calcium - Dissolved	7440-70-2		7930	200	ug/l	---	68000	200	ug/l	---	34100	200	ug/l	---
	Chromium	7440-47-3		ND	4.0	ug/l	---	ND	4.0	ug/l	---	16.1	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3		ND	4.0	ug/l	---	ND	4.0	ug/l	---	16.0	4.0	ug/l	---
	Cobalt	7440-48-4		ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4		ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8		ND	4.0	ug/l	---	2.2	4.0	ug/l	J	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8		ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6		161	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Iron - Dissolved	7439-89-6		ND	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1		ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1		ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4		906	200	ug/l	---	19400	200	ug/l	---	ND	200	ug/l	---
	Magnesium - Dissolved	7439-95-4		1270	200	ug/l	---	20000	200	ug/l	---	ND	200	ug/l	---
	Manganese	7439-96-5		4.8	8.0	ug/l	J	439	8.0	ug/l	---	ND	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5		ND	8.0	ug/l	---	428	8.0	ug/l	---	ND	8.0	ug/l	---
	Nickel	7440-02-0		4.0	4.0	ug/l	---	1.4	4.0	ug/l	J	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0		2.2	4.0	ug/l	J	1.6	4.0	ug/l	J	ND	4.0	ug/l	---
	Potassium	7440-09-7		13400	200	ug/l	---	2500	200	ug/l	---	4400	200	ug/l	---
	Potassium - Dissolved	7440-09-7		16600	200	ug/l	---	2190	200	ug/l	---	4160	200	ug/l	---
	Selenium	7782-49-2		ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2		ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4		ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4		ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5		34100	200	ug/l	---	8100	200	ug/l	---	15500	200	ug/l	---
	Sodium - Dissolved	7440-23-5		38400	200	ug/l	---	13200	200	ug/l	---	16300	200	ug/l	---
	Thallium	7440-28-0		ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0		ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2		3.8	4.0	ug/l	J	1.5	4.0	ug/l	J	13.4	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2		2.6	4.0	ug/l	J	ND	4.0	ug/l	---	13.7	4.0	ug/l	---
	Zinc	7440-66-6		10.7	16.0	ug/l	J	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6		ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	OSW-7470A														
	Mercury	7439-97-6		ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6		ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry															
	OSW-9012B														
	Cyanide, Total	57-12-5		ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A														
	Chloride	16887-00-6		10.3	0.48	mg/l	---	7.40	0.36	mg/l	---	3.42	0.12	mg/l	---
	Sulfate	14808-79-8		29.5	0.60	mg/l	---	5.28	0.60	mg/l	---	29.7	0.60	mg/l	---
Prep															
	APHA-2320B														
	Alkalinity	E-14506		77.2	5.0	mg/l	---	259	5.0	mg/l	---	122	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508		ND	5.0	mg/l	---	259	5.0	mg/l	---	ND	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-4(393-403)-083018				RW-4A(62-72)-083018				TB-06-083118			
		Lab Sample ID:	46016374115				46016374116				46016374117			
		Sample Date:	8/30/2018				8/30/2018				8/31/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1-Pentanol, 2-ethyl-4-methyl- - TIC	106-67-2												
	1-Propene, 2-methyl- - TIC	115-11-7												
	2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon disulfide	75-15-0	0.64	1.0	ug/l	J	0.61	1.0	ug/l	J	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Ethanethiol - TIC	75-08-1												
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-4(393-403)-083018				RW-4A(62-72)-083018				TB-06-083118			
		Lab Sample ID:	46016374115				46016374116				46016374117			
		Sample Date:	8/30/2018				8/30/2018				8/31/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
.gamma. Dodecalactone - TIC		2305-05-7												
1,1'-Biphenyl		92-52-4	ND	10	ug/l	---	ND	10	ug/l	---				
1,2,4,5-Tetrachlorobenzene		95-94-3	ND	10	ug/l	---	ND	10	ug/l	---				
1,4-Dioxane - TIC		123-91-1												
2(3H)-Benzothiazolone - TIC		934-34-9												
2,2'-oxybis[1-chloropropane]		108-60-1	ND	10	ug/l	---	ND	10	ug/l	---				
2,3,4,6-Tetrachlorophenol		58-90-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4,5-Trichlorophenol		95-95-4	ND	10	ug/l	---	ND	10	ug/l	---				
2,4,6-Trichlorophenol		88-06-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dichlorophenol		120-83-2	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dimethylphenol		105-67-9	ND	10	ug/l	---	ND	10	ug/l	---				
2,4-Dinitrophenol		51-28-5	ND	20	ug/l	---	ND	20	ug/l	---				
2,4-Dinitrotoluene		121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
2,6-Dinitrotoluene		606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
2-Chloronaphthalene		91-58-7	ND	10	ug/l	---	ND	10	ug/l	---				
2-Chlorophenol		95-57-8	ND	10	ug/l	---	ND	10	ug/l	---				
2-Methylnaphthalene		91-57-6	ND	10	ug/l	---	ND	10	ug/l	---				
2-Methylphenol		95-48-7	ND	10	ug/l	---	ND	10	ug/l	---				
2-Nitroaniline		88-74-4	ND	10	ug/l	---	ND	10	ug/l	---				
2-Nitrophenol		88-75-5	ND	10	ug/l	---	ND	10	ug/l	---				
3,3'-Dichlorobenzidine		91-94-1	ND	10	ug/l	---	ND	10	ug/l	---				
3-Nitroaniline		99-09-2	ND	10	ug/l	---	ND	10	ug/l	---				
4,6-Dinitro-2-methylphenol		534-52-1	ND	20	ug/l	---	ND	20	ug/l	---				
4-Bromophenyl phenyl ether		101-55-3	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chloro-3-methylphenol		59-50-7	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chloroaniline		106-47-8	ND	10	ug/l	---	ND	10	ug/l	---				
4-Chlorophenyl phenyl ether		7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---				
4-Methylphenol		106-44-5	ND	10	ug/l	---	ND	10	ug/l	---				
4-Nitroaniline		100-01-6	ND	10	ug/l	---	ND	10	ug/l	---				
4-Nitrophenol		100-02-7	ND	20	ug/l	---	ND	20	ug/l	---				
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC		82304-66-3												
Acenaphthene		83-32-9	ND	10	ug/l	---	ND	10	ug/l	---				
Acenaphthylene		208-96-8	ND	10	ug/l	---	ND	10	ug/l	---				
Acetophenone		98-86-2	ND	10	ug/l	---	ND	10	ug/l	---				
Anthracene		120-12-7	ND	10	ug/l	---	ND	10	ug/l	---				
Atrazine		1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Benzaldehyde		100-52-7	ND	10	ug/l	---	ND	10	ug/l	---				
Benzenesulfonamide, N-butyl- - TIC		3622-84-2												
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC		80-30-8												
Benzoic Acid - TIC		65-85-0												
Benzo[g,h,i]perylene		191-24-2	ND	10	ug/l	---	ND	10	ug/l	---				
Benzo[k]fluoranthene		207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
Bis(2-chloroethoxy)methane		111-91-1	ND	10	ug/l	---	ND	10	ug/l	---				
Bis(2-ethylhexyl) phthalate		117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Butyl benzyl phthalate		85-68-7	ND	10	ug/l	---	ND	10	ug/l	---				
Caprolactam		105-60-2	ND	10	ug/l	---	ND	10	ug/l	---				
Carbazole		86-74-8	ND	10	ug/l	---	ND	10	ug/l	---				
Chrysene		218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
Cyclic octaatomic sulfur - TIC		10544-50-0												
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- - TIC		5989-54-8												
Di-n-butyl phthalate		84-74-2	ND	10	ug/l	---	ND	10	ug/l	---				
Di-n-octyl phthalate		117-84-0	ND	10	ug/l	---	ND	10	ug/l	---				
Dibenzofuran		132-64-9	ND	10	ug/l	---	ND	10	ug/l	---				
Diethyl phthalate		84-66-2	ND	10	ug/l	---	ND	10	ug/l	---				
Diethyltoluamide - TIC		134-62-3												
Dimethyl phthalate		131-11-3	ND	10	ug/l	---	ND	10	ug/l	---				

Analytical Results Summary

CADENA Project ID: E203361
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Laboratory Submittal: 163741-1

		Sample Name:	RW-4(393-403)-083018				RW-4A(62-72)-083018				TB-06-083118			
		Lab Sample ID:	46016374115				46016374116				46016374117			
		Sample Date:	8/30/2018				8/30/2018				8/31/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	Dodecanoic acid - TIC	143-07-7												
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5												
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5												
	Ethanol, 2-butoxy- - TIC	111-76-2												
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---				
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---				
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ				
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---				
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Indolizine - TIC	274-40-8												
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---				
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---				
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---				
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---				
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---				
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---				
	Propanedioic acid, phenyl- - TIC	2613-89-0												
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---				
	Sulfur - TIC	13798-23-7												
	Unknown - TIC	TIC1												
	Unknown - TIC	TIC10												
	Unknown - TIC	TIC2												
	Unknown - TIC	TIC3												
	Unknown - TIC	TIC4												
	Unknown - TIC	TIC5												
	Unknown - TIC	TIC6												
	Unknown - TIC	TIC7												
	Unknown - TIC	TIC8												
	Unknown - TIC	TIC9												
	Vanillin - TIC	121-33-5												
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	ND	0.20	ug/l	---				
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---				
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---				
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---				
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---				
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---				
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.42	ug/l	---	ND	0.42	ug/l	---				
	PCB-1221	11104-28-2	ND	0.42	ug/l	---	ND	0.42	ug/l	---				
	PCB-1232	11141-16-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---				
	PCB-1242	53469-21-9	ND	0.42	ug/l	---	ND	0.42	ug/l	---				
	PCB-1248	12672-29-6	ND	0.42	ug/l	---	ND	0.42	ug/l	---				
	PCB-1254	11097-69-1	ND	0.42	ug/l	---	ND	0.42	ug/l	---				
	PCB-1260	11096-82-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---				
	PCB-1262	37324-23-5	ND	0.42	ug/l	---	ND	0.42	ug/l	---				
	PCB-1268	11100-14-4	ND	0.42	ug/l	---	ND	0.42	ug/l	---				
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.42	ug/l	---	ND	0.42	ug/l	---				

Analytical Results Summary

CADENA Project ID: E203361
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		Sample Name:	RW-4(393-403)-083018				RW-4A(62-72)-083018				TB-06-083118			
		Lab Sample ID:	46016374115				46016374116				46016374117			
		Sample Date:	8/30/2018				8/30/2018				8/31/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
Metals														
	OSW-6020B													
	Aluminum	7429-90-5	272	40.0	ug/l	---	163	40.0	ug/l	---				
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---				
	Antimony	7440-36-0	1.7	2.0	ug/l	J	1.5	2.0	ug/l	J				
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Arsenic	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Barium	7440-39-3	18.2	4.0	ug/l	---	4.6	4.0	ug/l	---				
	Barium - Dissolved	7440-39-3	14.1	4.0	ug/l	---	3.9	4.0	ug/l	J				
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Calcium	7440-70-2	19100	200	ug/l	---	9180	200	ug/l	---				
	Calcium - Dissolved	7440-70-2	17100	200	ug/l	---	8680	200	ug/l	---				
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Copper	7440-50-8	ND	4.0	ug/l	---	4.8	4.0	ug/l	---				
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Iron	7439-89-6	158	120	ug/l	---	220	120	ug/l	---				
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---				
	Lead	7439-92-1	0.46	1.2	ug/l	UB	1.6	1.2	ug/l	UB				
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---				
	Magnesium	7439-95-4	6340	200	ug/l	---	3860	200	ug/l	---				
	Magnesium - Dissolved	7439-95-4	6100	200	ug/l	---	3820	200	ug/l	---				
	Manganese	7439-96-5	8.9	8.0	ug/l	---	3.4	8.0	ug/l	J				
	Manganese - Dissolved	7439-96-5	ND	8.0	ug/l	---	ND	8.0	ug/l	---				
	Nickel	7440-02-0	1.3	4.0	ug/l	J	30.0	4.0	ug/l	---				
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	34.7	4.0	ug/l	---				
	Potassium	7440-09-7	7250	200	ug/l	---	1300	200	ug/l	---				
	Potassium - Dissolved	7440-09-7	3600	200	ug/l	---	1140	200	ug/l	---				
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---				
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---				
	Silver	7440-22-4	18.6	2.0	ug/l	---	ND	2.0	ug/l	---				
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---				
	Sodium	7440-23-5	8540	200	ug/l	---	5420	200	ug/l	---				
	Sodium - Dissolved	7440-23-5	7830	200	ug/l	---	5610	200	ug/l	---				
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---				
	Vanadium	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---				
	Zinc	7440-66-6	8.4	16.0	ug/l	J	20.5	16.0	ug/l	---				
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	17.4	16.0	ug/l	---				
	OSW-7470A													
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---				
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---				
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---				
	OSW-9056A													
	Chloride	16887-00-6	1.94	0.12	mg/l	---	2.12	0.12	mg/l	---				
	Sulfate	14808-79-8	18.4	0.60	mg/l	---	9.31	0.60	mg/l	---				
Prep														
	APHA-2320B													
	Alkalinity	E-14506	66.2	5.0	mg/l	---	37.4	5.0	mg/l	---				
	Bicarbonate Alkalinity as CaCO3	E-14508	66.2	5.0	mg/l	---	37.4	5.0	mg/l	---				

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-4A-(113-123)-083018				RW-11D(262-267)-083118				RW-14S(135-155)-083118			
		Lab Sample ID:	46016374118				4601637412				4601637413			
		Sample Date:	8/31/2018				8/31/2018				8/31/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Pentanol, 2-ethyl-4-methyl- - TIC	106-67-2												
1-Propene, 2-methyl- - TIC	115-11-7					9.1	---	ug/l	NJ				
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	3.5	5.0	ug/l	J	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	39	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	11	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	0.48	1.0	ug/l	J	10	1.0	ug/l	---	0.54	1.0	ug/l	J
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	4.8	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	5.5	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethanethiol - TIC	75-08-1												
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	0.95	1.0	ug/l	J	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	ND	1.0	ug/l	---	0.40	1.0	ug/l	J	0.32	1.0	ug/l	J
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-4A-(113-123)-083018				RW-11D(262-267)-083118				RW-14S(135-155)-083118			
		Lab Sample ID:	46016374118				4601637412				4601637413			
		Sample Date:	8/31/2018				8/31/2018				8/31/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
.gamma. Dodecalactone - TIC		2305-05-7												
1,1'-Biphenyl		92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene		95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,4-Dioxane - TIC		123-91-1					6.4	---	ug/l	NJ				
2(3H)-Benzothiazolone - TIC		934-34-9					7.1	---	ug/l	NJ				
2,2'-oxybis[1-chloropropane]		108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol		58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol		95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol		88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol		120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol		105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol		51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene		121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene		606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene		91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol		95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene		91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol		95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	UJ
2-Nitroaniline		88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol		88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine		91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline		99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol		534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether		101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol		59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline		106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether		7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol		106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline		100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol		100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC		82304-66-3					12	---	ug/l	NJ				
Acenaphthene		83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene		208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone		98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene		120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine		1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	UJ	ND	2.0	ug/l	UJ
Benzaldehyde		100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzenesulfonamide, N-butyl- - TIC		3622-84-2									3900	---	ug/l	NJ
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC		80-30-8					7.9	---	ug/l	NJ				
Benzoic Acid - TIC		65-85-0												
Benzo[g,h,i]perylene		191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene		207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane		111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate		117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate		85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam		105-60-2	ND	10	ug/l	---	ND	10	ug/l	R	ND	10	ug/l	R
Carbazole		86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene		218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cyclic octaatomic sulfur - TIC		10544-50-0									37	---	ug/l	NJ
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- - TIC		5989-54-8												
Di-n-butyl phthalate		84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate		117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran		132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate		84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyltoluamide - TIC		134-62-3					7.2	---	ug/l	NJ				
Dimethyl phthalate		131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-4A-(113-123)-083018				RW-11D(262-267)-083118				RW-14S(135-155)-083118			
		Lab Sample ID:	46016374118				4601637412				4601637413			
		Sample Date:	8/31/2018				8/31/2018				8/31/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	Dodecanoic acid - TIC	143-07-7												
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5												
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5												
	Ethanol, 2-butoxy- - TIC	111-76-2												
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Indolizine - TIC	274-40-8												
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	2.5	10	ug/l	J	ND	10	ug/l	---
	Propanedioic acid, phenyl- - TIC	2613-89-0												
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Sulfur - TIC	13798-23-7									22	---	ug/l	NJ
	Unknown - TIC	TIC1					28	---	ug/l	NJ				
	Unknown - TIC	TIC10												
	Unknown - TIC	TIC2												
	Unknown - TIC	TIC3												
	Unknown - TIC	TIC4												
	Unknown - TIC	TIC5												
	Unknown - TIC	TIC6												
	Unknown - TIC	TIC7												
	Unknown - TIC	TIC8												
	Unknown - TIC	TIC9												
	Vanillin - TIC	121-33-5												
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	41	0.20	ug/l	---	ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	0.034	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.42	ug/l	---
	PCB-1221	11104-28-2	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.42	ug/l	---
	PCB-1232	11141-16-5	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.42	ug/l	---
	PCB-1242	53469-21-9	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.42	ug/l	---
	PCB-1248	12672-29-6	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.42	ug/l	---
	PCB-1254	11097-69-1	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.42	ug/l	---
	PCB-1260	11096-82-5	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.42	ug/l	---
	PCB-1262	37324-23-5	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.42	ug/l	---
	PCB-1268	11100-14-4	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.42	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.42	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-4A-(113-123)-083018				RW-11D(262-267)-083118				RW-14S(135-155)-083118			
		Lab Sample ID:	46016374118				4601637412				4601637413			
		Sample Date:	8/31/2018				8/31/2018				8/31/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
Metals														
	OSW-6020B													
	Aluminum	7429-90-5	18.3	40.0	ug/l	J	9820	40.0	ug/l	---	ND	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	10200	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	1.5	2.0	ug/l	J	2.4	2.0	ug/l	---	0.65	2.0	ug/l	J
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	0.93	2.0	ug/l	J	1.4	2.0	ug/l	J
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	2.1	2.0	ug/l	---
	Barium	7440-39-3	14.4	4.0	ug/l	---	80.4	4.0	ug/l	---	9.5	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	14.1	4.0	ug/l	---	49.8	4.0	ug/l	---	9.6	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	12300	200	ug/l	---	127000	200	ug/l	---	44200	200	ug/l	---
	Calcium - Dissolved	7440-70-2	11900	200	ug/l	---	86600	200	ug/l	---	43500	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	3.9	4.0	ug/l	J	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	ND	4.0	ug/l	---	3.2	4.0	ug/l	J	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	ND	120	ug/l	---	85.6	120	ug/l	J	58.8	120	ug/l	J
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	0.76	1.2	ug/l	UB	0.59	1.2	ug/l	UB	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	4680	200	ug/l	---	ND	200	ug/l	---	11900	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	4850	200	ug/l	---	ND	200	ug/l	---	12300	200	ug/l	---
	Manganese	7439-96-5	ND	8.0	ug/l	---	ND	8.0	ug/l	---	60.2	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	ND	8.0	ug/l	---	ND	8.0	ug/l	---	46.4	8.0	ug/l	---
	Nickel	7440-02-0	24.0	4.0	ug/l	---	9.5	4.0	ug/l	---	ND	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	23.4	4.0	ug/l	---	9.2	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	1520	200	ug/l	---	38100	200	ug/l	---	2960	200	ug/l	---
	Potassium - Dissolved	7440-09-7	1360	200	ug/l	---	34100	200	ug/l	---	2830	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	1.8	10.0	ug/l	J	ND	10.0	ug/l	UJ
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	17.8	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	5800	200	ug/l	---	147000	200	ug/l	---	43600	200	ug/l	---
	Sodium - Dissolved	7440-23-5	6140	200	ug/l	---	175000	200	ug/l	---	46800	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	1.3	4.0	ug/l	J	1.8	4.0	ug/l	J
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	1.4	4.0	ug/l	J
	Zinc	7440-66-6	17.6	16.0	ug/l	---	9.3	16.0	ug/l	J	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	14.0	16.0	ug/l	J	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	1.90	0.12	mg/l	---	33.1	1.56	mg/l	---	36.7	1.80	mg/l	---
	Sulfate	14808-79-8	15.2	0.60	mg/l	---	3.10	0.60	mg/l	---	1.92	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	46.9	5.0	mg/l	---	573	5.0	mg/l	---	190	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	46.9	5.0	mg/l	---	ND	5.0	mg/l	---	190	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-15S(110-120)-083118				RW-15D(127-137)-083118				DUP-04-083118			
		Lab Sample ID:	4601637414				4601637415				4601637416			
		Sample Date:	8/31/2018				8/31/2018				8/31/2018			
Analyte	Cas No.		Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
1,1,1-Trichloroethane	71-55-6		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Pentanol, 2-ethyl-4-methyl- - TIC	106-67-2													
1-Propene, 2-methyl- - TIC	115-11-7													
2-Butanone (MEK)	78-93-3		ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6		ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1		ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1		12	5.0	ug/l	---	41	5.0	ug/l	---	9.0	5.0	ug/l	---
Benzene	71-43-2		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0		4.3	1.0	ug/l	---	11	1.0	ug/l	---	2.4	1.0	ug/l	---
Carbon tetrachloride	56-23-5		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3		0.42	1.0	ug/l	J	0.48	1.0	ug/l	J	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethanethiol - TIC	75-08-1													
Ethylbenzene	100-41-4		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9		ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2		0.44	1.0	ug/l	J	ND	1.0	ug/l	---	0.45	1.0	ug/l	J
Styrene	100-42-5		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3		1.0	1.0	ug/l	---	1.5	1.0	ug/l	---	0.84	1.0	ug/l	J
trans-1,2-Dichloroethene	156-60-5		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4		ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7		ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM														
1,2,3-Trichloropropane	96-18-4		ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8		ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4		ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-15S(110-120)-083118				RW-15D(127-137)-083118				DUP-04-083118			
		Lab Sample ID:	4601637414				4601637415				4601637416			
		Sample Date:	8/31/2018				8/31/2018				8/31/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
.gamma. Dodecalactone - TIC		2305-05-7												
1,1'-Biphenyl		92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene		95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,4-Dioxane - TIC		123-91-1												
2(3H)-Benzothiazolone - TIC		934-34-9												
2,2'-oxybis[1-chloropropane]		108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol		58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol		95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol		88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol		120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol		105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol		51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene		121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene		606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene		91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol		95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene		91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol		95-48-7	ND	10	ug/l	UJ	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitroaniline		88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol		88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine		91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline		99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol		534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether		101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol		59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline		106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether		7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol		106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline		100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol		100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC		82304-66-3												
Acenaphthene		83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene		208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone		98-86-2	ND	10	ug/l	---	1.4	10	ug/l	J	ND	10	ug/l	---
Anthracene		120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine		1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	UJ	ND	2.0	ug/l	UJ
Benzaldehyde		100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzenesulfonamide, N-butyl- - TIC		3622-84-2					4100	---	ug/l	NJ				
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC		80-30-8												
Benzoic Acid - TIC		65-85-0					23	---	ug/l	NJ				
Benzo[g,h,i]perylene		191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene		207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane		111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate		117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate		85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam		105-60-2	ND	10	ug/l	---	ND	10	ug/l	R	ND	10	ug/l	R
Carbazole		86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene		218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cyclic octaatomic sulfur - TIC		10544-50-0												
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- - TIC		5989-54-8	11	---	ug/l	NJ								
Di-n-butyl phthalate		84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate		117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran		132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate		84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyltoluamide - TIC		134-62-3					7.5	---	ug/l	NJ				
Dimethyl phthalate		131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-15S(110-120)-083118				RW-15D(127-137)-083118				DUP-04-083118			
		Lab Sample ID:	4601637414				4601637415				4601637416			
		Sample Date:	8/31/2018				8/31/2018				8/31/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	Dodecanoic acid - TIC	143-07-7					12	---	ug/l	NJ				
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5					68	---	ug/l	NJ				
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5	23	---	ug/l	NJ					15	---	ug/l	NJ
	Ethanol, 2-butoxy- - TIC	111-76-2					21	---	ug/l	NJ				
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Indolizine - TIC	274-40-8					6.5	---	ug/l	NJ				
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	12	10	ug/l	---	ND	10	ug/l	---
	Propanedioic acid, phenyl- - TIC	2613-89-0					16	---	ug/l	NJ				
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Sulfur - TIC	13798-23-7												
	Unknown - TIC	TIC1					7.3	---	ug/l	NJ				
	Unknown - TIC	TIC10					7.3	---	ug/l	NJ				
	Unknown - TIC	TIC2					6.9	---	ug/l	NJ				
	Unknown - TIC	TIC3					7.7	---	ug/l	NJ				
	Unknown - TIC	TIC4					34	---	ug/l	NJ				
	Unknown - TIC	TIC5					8.9	---	ug/l	NJ				
	Unknown - TIC	TIC6					7.2	---	ug/l	NJ				
	Unknown - TIC	TIC7					12	---	ug/l	NJ				
	Unknown - TIC	TIC8					20	---	ug/l	NJ				
	Unknown - TIC	TIC9					8.1	---	ug/l	NJ				
	Vanillin - TIC	121-33-5					14	---	ug/l	NJ				
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	0.49	0.20	ug/l	---	ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1221	11104-28-2	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1232	11141-16-5	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1242	53469-21-9	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1248	12672-29-6	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1254	11097-69-1	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1260	11096-82-5	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1262	37324-23-5	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1268	11100-14-4	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	RW-15S(110-120)-083118				RW-15D(127-137)-083118				DUP-04-083118			
		Lab Sample ID:	4601637414				4601637415				4601637416			
		Sample Date:	8/31/2018				8/31/2018				8/31/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
Metals														
	OSW-6020B													
	Aluminum	7429-90-5	87.8	40.0	ug/l	---	105	40.0	ug/l	---	86.1	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	46.8	40.0	ug/l	---	87.8	40.0	ug/l	---	59.2	40.0	ug/l	---
	Antimony	7440-36-0	2.4	2.0	ug/l	---	2.1	2.0	ug/l	---	2.2	2.0	ug/l	---
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	23.5	2.0	ug/l	---	6.8	2.0	ug/l	---	20.8	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	31.0	2.0	ug/l	---	8.2	2.0	ug/l	---	28.3	2.0	ug/l	---
	Barium	7440-39-3	5.2	4.0	ug/l	---	16.7	4.0	ug/l	---	4.8	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	5.2	4.0	ug/l	---	16.8	4.0	ug/l	---	4.8	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	39800	200	ug/l	---	82300	200	ug/l	---	38600	200	ug/l	---
	Calcium - Dissolved	7440-70-2	40300	200	ug/l	---	79500	200	ug/l	---	37000	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	2.0	4.0	ug/l	J
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Iron	7439-89-6	71.6	120	ug/l	J	77.3	120	ug/l	J	ND	120	ug/l	---
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	55.1	120	ug/l	J	ND	120	ug/l	---
	Lead	7439-92-1	0.51	1.2	ug/l	UB	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	1340	200	ug/l	---	96.5	200	ug/l	J	2120	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	1140	200	ug/l	---	109	200	ug/l	J	2050	200	ug/l	---
	Manganese	7439-96-5	ND	8.0	ug/l	---	ND	8.0	ug/l	---	ND	8.0	ug/l	---
	Manganese - Dissolved	7439-96-5	ND	8.0	ug/l	---	ND	8.0	ug/l	---	ND	8.0	ug/l	---
	Nickel	7440-02-0	4.9	4.0	ug/l	---	8.4	4.0	ug/l	---	2.8	4.0	ug/l	J
	Nickel - Dissolved	7440-02-0	1.5	4.0	ug/l	J	8.0	4.0	ug/l	---	ND	4.0	ug/l	---
	Potassium	7440-09-7	4330	200	ug/l	---	22300	200	ug/l	---	3810	200	ug/l	---
	Potassium - Dissolved	7440-09-7	4220	200	ug/l	---	20100	200	ug/l	---	3560	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	5.2	10.0	ug/l	J	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	1.4	10.0	ug/l	J	12.6	10.0	ug/l	---	1.2	10.0	ug/l	J
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	55700	200	ug/l	---	148000	200	ug/l	---	41400	200	ug/l	---
	Sodium - Dissolved	7440-23-5	63300	200	ug/l	---	148000	200	ug/l	---	49800	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	10.2	4.0	ug/l	---	36.3	4.0	ug/l	---	8.0	4.0	ug/l	---
	Vanadium - Dissolved	7440-62-2	11.0	4.0	ug/l	---	35.6	4.0	ug/l	---	8.4	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	ND	16.0	ug/l	---
	OSW-7470A													
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	10.8	0.96	mg/l	---	26.3	2.04	mg/l	---	12.5	0.96	mg/l	---
	Sulfate	14808-79-8	102	4.80	mg/l	---	232	10.2	mg/l	---	111	4.80	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	98.0	5.0	mg/l	---	204	5.0	mg/l	---	97.2	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	9.7	5.0	mg/l	---	ND	5.0	mg/l	---	18.7	5.0	mg/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	FB-04-083118				RW-14D(175-185)-083118				RW-13(150-170)-083018			
		Lab Sample ID:	4601637417				4601637418				4601637419			
		Sample Date:	8/31/2018				8/31/2018				8/30/2018			
Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC													
OSW-8260C													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
1-Pentanol, 2-ethyl-4-methyl- - TIC	106-67-2												
1-Propene, 2-methyl- - TIC	115-11-7												
2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Carbon disulfide	75-15-0	1.0	1.0	ug/l	---	0.82	1.0	ug/l	J	0.52	1.0	ug/l	J
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroethane	75-00-3	ND	1.0	ug/l	---	0.60	1.0	ug/l	J	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethanethiol - TIC	75-08-1												
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene Chloride	75-09-2	4.9	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
OSW-8260CSIM													
1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	FB-04-083118				RW-14D(175-185)-083118				RW-13(150-170)-083018			
		Lab Sample ID:	4601637417				4601637418				4601637419			
		Sample Date:	8/31/2018				8/31/2018				8/30/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS SVOC														
OSW-8270D														
.gamma. Dodecalactone - TIC		2305-05-7												
1,1'-Biphenyl		92-52-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,2,4,5-Tetrachlorobenzene		95-94-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
1,4-Dioxane - TIC		123-91-1												
2(3H)-Benzothiazolone - TIC		934-34-9												
2,2'-oxybis[1-chloropropane]		108-60-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,3,4,6-Tetrachlorophenol		58-90-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,5-Trichlorophenol		95-95-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4,6-Trichlorophenol		88-06-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dichlorophenol		120-83-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dimethylphenol		105-67-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2,4-Dinitrophenol		51-28-5	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
2,4-Dinitrotoluene		121-14-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2,6-Dinitrotoluene		606-20-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
2-Chloronaphthalene		91-58-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Chlorophenol		95-57-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylnaphthalene		91-57-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Methylphenol		95-48-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitroaniline		88-74-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
2-Nitrophenol		88-75-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3,3'-Dichlorobenzidine		91-94-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
3-Nitroaniline		99-09-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4,6-Dinitro-2-methylphenol		534-52-1	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
4-Bromophenyl phenyl ether		101-55-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloro-3-methylphenol		59-50-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chloroaniline		106-47-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Chlorophenyl phenyl ether		7005-72-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Methylphenol		106-44-5	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitroaniline		100-01-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
4-Nitrophenol		100-02-7	ND	20	ug/l	---	ND	20	ug/l	---	ND	20	ug/l	---
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione - TIC		82304-66-3												
Acenaphthene		83-32-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acenaphthylene		208-96-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Acetophenone		98-86-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Anthracene		120-12-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Atrazine		1912-24-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Benzaldehyde		100-52-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzenesulfonamide, N-butyl- - TIC		3622-84-2					3400	---	ug/l	NJ				
Benzenesulfonamide, N-cyclohexyl-4-methyl- - TIC		80-30-8												
Benzoic Acid - TIC		65-85-0												
Benzo[g,h,i]perylene		191-24-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Benzo[k]fluoranthene		207-08-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Bis(2-chloroethoxy)methane		111-91-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Bis(2-ethylhexyl) phthalate		117-81-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Butyl benzyl phthalate		85-68-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Caprolactam		105-60-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Carbazole		86-74-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Chrysene		218-01-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
Cyclic octaatomic sulfur - TIC		10544-50-0												
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)- - TIC		5989-54-8												
Di-n-butyl phthalate		84-74-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Di-n-octyl phthalate		117-84-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Dibenzofuran		132-64-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyl phthalate		84-66-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Diethyltoluamide - TIC		134-62-3												
Dimethyl phthalate		131-11-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 163741-1

		Sample Name:	FB-04-083118				RW-14D(175-185)-083118				RW-13(150-170)-083018			
		Lab Sample ID:	4601637417				4601637418				4601637419			
		Sample Date:	8/31/2018				8/31/2018				8/30/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
	Dodecanoic acid - TIC	143-07-7												
	Ethanol, 1-(2-butoxyethoxy)- - TIC	54446-78-5												
	Ethanol, 2-(2-butoxyethoxy)- - TIC	112-34-5					56	---	ug/l	NJ				
	Ethanol, 2-butoxy- - TIC	111-76-2												
	Fluoranthene	206-44-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Fluorene	86-73-7	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachlorobutadiene	87-68-3	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ	ND	1.0	ug/l	UJ
	Hexachlorocyclopentadiene	77-47-4	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Hexachloroethane	67-72-1	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Indolizine - TIC	274-40-8												
	Isophorone	78-59-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	N-Nitrosodi-n-propylamine	621-64-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	N-Nitrosodiphenylamine	86-30-6	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Naphthalene	91-20-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Nitrobenzene	98-95-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Phenanthrene	85-01-8	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Phenol	108-95-2	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Propanedioic acid, phenyl- - TIC	2613-89-0												
	Pyrene	129-00-0	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
	Sulfur - TIC	13798-23-7												
	Unknown - TIC	TIC1					94	---	ug/l	NJ				
	Unknown - TIC	TIC10												
	Unknown - TIC	TIC2					7.3	---	ug/l	NJ				
	Unknown - TIC	TIC3												
	Unknown - TIC	TIC4												
	Unknown - TIC	TIC5												
	Unknown - TIC	TIC6												
	Unknown - TIC	TIC7												
	Unknown - TIC	TIC8												
	Unknown - TIC	TIC9												
	Vanillin - TIC	121-33-5												
OSW-8270DSIM														
	1,4-Dioxane	123-91-1	ND	0.20	ug/l	---	0.36	0.20	ug/l	---	ND	0.20	ug/l	---
	Benzo[a]anthracene	56-55-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[a]pyrene	50-32-8	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Benzo[b]fluoranthene	205-99-2	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Bis(2-chloroethyl)ether	111-44-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	Dibenz(a,h)anthracene	53-70-3	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	Hexachlorobenzene	118-74-1	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Indeno[1,2,3-cd]pyrene	193-39-5	ND	0.050	ug/l	---	ND	0.050	ug/l	---	ND	0.050	ug/l	---
	N-Nitrosodimethylamine	62-75-9	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Pentachlorophenol	87-86-5	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
GC Other														
OSW-8082A														
	PCB-1016	12674-11-2	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1221	11104-28-2	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1232	11141-16-5	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1242	53469-21-9	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1248	12672-29-6	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1254	11097-69-1	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1260	11096-82-5	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1262	37324-23-5	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	PCB-1268	11100-14-4	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---
	Polychlorinated biphenyls, Total	1336-36-3	ND	0.41	ug/l	---	ND	0.41	ug/l	---	ND	0.41	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
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		Sample Name:	FB-04-083118				RW-14D(175-185)-083118				RW-13(150-170)-083018			
		Lab Sample ID:	4601637417				4601637418				4601637419			
		Sample Date:	8/31/2018				8/31/2018				8/30/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
Metals														
	OSW-6020B													
	Aluminum	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	91.8	40.0	ug/l	---
	Aluminum - Dissolved	7429-90-5	ND	40.0	ug/l	---	ND	40.0	ug/l	---	ND	40.0	ug/l	---
	Antimony	7440-36-0	1.9	2.0	ug/l	J	2.1	2.0	ug/l	---	1.4	2.0	ug/l	J
	Antimony - Dissolved	7440-36-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic	7440-38-2	ND	2.0	ug/l	---	5.2	2.0	ug/l	---	ND	2.0	ug/l	---
	Arsenic - Dissolved	7440-38-2	ND	2.0	ug/l	---	1.3	2.0	ug/l	J	ND	2.0	ug/l	---
	Barium	7440-39-3	ND	4.0	ug/l	---	33.4	4.0	ug/l	---	4.1	4.0	ug/l	---
	Barium - Dissolved	7440-39-3	ND	4.0	ug/l	---	24.7	4.0	ug/l	---	4.8	4.0	ug/l	---
	Beryllium	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Beryllium - Dissolved	7440-41-7	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Cadmium	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Cadmium - Dissolved	7440-43-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Calcium	7440-70-2	ND	200	ug/l	---	62200	200	ug/l	---	27000	200	ug/l	---
	Calcium - Dissolved	7440-70-2	ND	200	ug/l	---	62800	200	ug/l	---	25100	200	ug/l	---
	Chromium	7440-47-3	ND	4.0	ug/l	---	1.3	4.0	ug/l	J	ND	4.0	ug/l	---
	Chromium - Dissolved	7440-47-3	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Cobalt - Dissolved	7440-48-4	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Copper	7440-50-8	ND	4.0	ug/l	---	2.5	4.0	ug/l	J	ND	4.0	ug/l	---
	Copper - Dissolved	7440-50-8	ND	4.0	ug/l	---	2.2	4.0	ug/l	J	ND	4.0	ug/l	---
	Iron	7439-89-6	ND	120	ug/l	---	12200	120	ug/l	---	101	120	ug/l	J
	Iron - Dissolved	7439-89-6	ND	120	ug/l	---	ND	120	ug/l	---	ND	120	ug/l	---
	Lead	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	0.66	1.2	ug/l	UB
	Lead - Dissolved	7439-92-1	ND	1.2	ug/l	---	ND	1.2	ug/l	---	ND	1.2	ug/l	---
	Magnesium	7439-95-4	ND	200	ug/l	---	11200	200	ug/l	---	6530	200	ug/l	---
	Magnesium - Dissolved	7439-95-4	ND	200	ug/l	---	14300	200	ug/l	---	7220	200	ug/l	---
	Manganese	7439-96-5	ND	8.0	ug/l	---	556	8.0	ug/l	---	7.1	8.0	ug/l	J
	Manganese - Dissolved	7439-96-5	ND	8.0	ug/l	---	552	8.0	ug/l	---	10.6	8.0	ug/l	---
	Nickel	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	6.0	4.0	ug/l	---
	Nickel - Dissolved	7440-02-0	ND	4.0	ug/l	---	ND	4.0	ug/l	---	6.6	4.0	ug/l	---
	Potassium	7440-09-7	ND	200	ug/l	---	5220	200	ug/l	---	1650	200	ug/l	---
	Potassium - Dissolved	7440-09-7	ND	200	ug/l	---	5100	200	ug/l	---	1480	200	ug/l	---
	Selenium	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Selenium - Dissolved	7782-49-2	ND	10.0	ug/l	---	ND	10.0	ug/l	---	ND	10.0	ug/l	---
	Silver	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Silver - Dissolved	7440-22-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
	Sodium	7440-23-5	ND	200	ug/l	---	202000	200	ug/l	---	5180	200	ug/l	---
	Sodium - Dissolved	7440-23-5	ND	200	ug/l	---	196000	200	ug/l	---	5150	200	ug/l	---
	Thallium	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Thallium - Dissolved	7440-28-0	ND	0.80	ug/l	---	ND	0.80	ug/l	---	ND	0.80	ug/l	---
	Vanadium	7440-62-2	ND	4.0	ug/l	---	2.2	4.0	ug/l	J	1.2	4.0	ug/l	J
	Vanadium - Dissolved	7440-62-2	ND	4.0	ug/l	---	ND	4.0	ug/l	---	ND	4.0	ug/l	---
	Zinc	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	13.7	16.0	ug/l	J
	Zinc - Dissolved	7440-66-6	ND	16.0	ug/l	---	ND	16.0	ug/l	---	13.0	16.0	ug/l	J
	OSW-7470A													
	Mercury	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
	Mercury - Dissolved	7439-97-6	ND	0.20	ug/l	---	ND	0.20	ug/l	---	ND	0.20	ug/l	---
General Chemistry														
	OSW-9012B													
	Cyanide, Total	57-12-5	ND	0.010	mg/l	---	ND	0.010	mg/l	---	ND	0.010	mg/l	---
	OSW-9056A													
	Chloride	16887-00-6	0.11	0.12	mg/l	J	62.7	2.88	mg/l	---	5.71	0.24	mg/l	---
	Sulfate	14808-79-8	0.40	0.60	mg/l	J	223	14.4	mg/l	---	12.2	0.60	mg/l	---
Prep														
	APHA-2320B													
	Alkalinity	E-14506	ND	5.0	mg/l	---	307	5.0	mg/l	---	102	5.0	mg/l	---
	Bicarbonate Alkalinity as CaCO3	E-14508	ND	5.0	mg/l	---	307	5.0	mg/l	---	84.2	5.0	mg/l	---

September 18, 2018

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CADENA project ID: E203361
Project: Ford Ringwood Mines Project
Project number:
Client project scope reference: Sample COC only was used to define project analytical requirements.
Laboratory: TestAmerica - Edison
Laboratory submittal: 164119-1
Sample date: 2018-09-05
Report received by CADENA: 2018-09-17
Initial Data Verification completed by CADENA: 2018-09-18

The following minor QC exceptions or missing information were noted:

TIC - Tentatively Identified Compounds (TIC's) detections reported for samples noted should all be considered to be estimated and qualified with NJ flags.
GCMS VOC

GCMS VOC CCV STANDARD response outliers as noted in the laboratory submittal case narrative were not used to qualify client sample results as part of this level 2 data package verification review.

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

8 Water sample(s) and 1 trip blank were analyzed for GCMS VOC and GCMS SVOC parameter(s).

Sample/MS/MSD Surrogate Recovery, Blank/LCS Surrogate Recovery, LCS/LCD Recovery, LCS/LCD RPD, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at http://clms.cadenaco.com/index.cfm.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JB	NON-DETECT AT THE CONCENTRATION REPORTED AND ESTIMATED
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
JUB	NON-DETECT AT THE REPORTING LIMIT AND ESTIMATED
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Qualified Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 164119-1

		Sample Name:	CMS-50-090518				OB-20B-090518				SC-01-090518			
		Lab Sample ID:	4601641191				4601641195				4601641198			
		Sample Date:	9/5/2018				9/5/2018				9/5/2018			
Analyte	**Cas No.**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**	**Result**	**Report Limit**	**Units**	**Valid Qualifier**
GC/MS VOC													
OSW-8260C													
Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7									5.9	---	ug/l	NJ
Benzene, 1,2,3-trimethyl- - TIC	526-73-8									8.2	---	ug/l	NJ
Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6									7.0	---	ug/l	NJ
Indane - TIC	496-11-7					5.2	---	ug/l	NJ				
Isopropyl alcohol - TIC	67-63-0	43	10	ug/l	NJ								

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 164119-1

		Sample Name:	CMS-50-090518				RW-6-090518				CMS-100-090518			
		Lab Sample ID:	4601641191				4601641192				4601641193			
		Sample Date:	9/5/2018				9/5/2018				9/5/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	0.40	1.0	ug/l	J	ND	1.0	ug/l	---
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Benzene	71-43-2	ND	1.0	ug/l	---	1.3	1.0	ug/l	---	ND	1.0	ug/l	---
	Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7												
	Benzene, 1,2,3-trimethyl- - TIC	526-73-8												
	Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6												
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	3.5	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	ND	1.0	ug/l	---	0.36	1.0	ug/l	J	ND	1.0	ug/l	---
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Indane - TIC	496-11-7												
	Isopropyl alcohol - TIC	67-63-0	43	10	ug/l	NJ								
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	0.28	1.0	ug/l	J	ND	1.0	ug/l	---
	Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Toluene	108-88-3	ND	1.0	ug/l	---	1.0	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
GC/MS SVOC														
OSW-8260CSIM														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 164119-1

		Sample Name:	CMS-160-090518				OB-20B-090518				RW-6A-090518			
		Lab Sample ID:	4601641194				4601641195				4601641196			
		Sample Date:	9/5/2018				9/5/2018				9/5/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.32	1.0	ug/l	J
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Benzene	71-43-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.90	1.0	ug/l	J
	Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7												
	Benzene, 1,2,3-trimethyl- - TIC	526-73-8												
	Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6												
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	1.1	1.0	ug/l	---	1.4	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	ND	1.0	ug/l	---	0.87	1.0	ug/l	J	0.42	1.0	ug/l	J
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Indane - TIC	496-11-7					5.2	---	ug/l	NJ				
	Isopropyl alcohol - TIC	67-63-0												
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	0.47	1.0	ug/l	J	ND	1.0	ug/l	---
	Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---
GC/MS SVOC														
OSW-8260CSIM														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---

Analytical Results Summary

CADENA Project ID: E203361
Laboratory: TestAmerica - Edison
Laboratory Submittal: 164119-1

		Sample Name:	CMS-27S-090518				SC-01-090518				TB-01-09052018			
		Lab Sample ID:	4601641197				4601641198				4601641199			
		Sample Date:	9/5/2018				9/5/2018				9/5/2018			
	Analyte	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC														
OSW-8260C														
	1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,1-Dichloroethene	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,3-Trichlorobenzene	87-61-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	2-Butanone (MEK)	78-93-3	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Benzene	71-43-2	ND	1.0	ug/l	---	1.6	1.0	ug/l	---	ND	1.0	ug/l	---
	Benzene, 1,2,3,5-tetramethyl- - TIC	527-53-7					5.9	---	ug/l	NJ				
	Benzene, 1,2,3-trimethyl- - TIC	526-73-8					8.2	---	ug/l	NJ				
	Benzene, 2-ethenyl-1,4-dimethyl- - TIC	2039-89-6					7.0	---	ug/l	NJ				
	Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Bromomethane	74-83-9	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon disulfide	75-15-0	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorobromomethane	74-97-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chlorodibromomethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroethane	75-00-3	ND	1.0	ug/l	---	1.3	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Chloromethane	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Cyclohexane	110-82-7	ND	1.0	ug/l	---	1.5	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Dichlorodifluoromethane	75-71-8	ND	1.0	ug/l	---	0.58	1.0	ug/l	J	ND	1.0	ug/l	---
	Ethylbenzene	100-41-4	ND	1.0	ug/l	---	0.34	1.0	ug/l	J	ND	1.0	ug/l	---
	Indane - TIC	496-11-7												
	Isopropyl alcohol - TIC	67-63-0												
	Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	1.5	1.0	ug/l	---	ND	1.0	ug/l	---
	Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
	Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylcyclohexane	108-87-2	ND	1.0	ug/l	---	1.2	1.0	ug/l	---	ND	1.0	ug/l	---
	Methylene Chloride	75-09-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Toluene	108-88-3	ND	1.0	ug/l	---	0.43	1.0	ug/l	J	ND	1.0	ug/l	---
	trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichloroethene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Trichlorofluoromethane	75-69-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
	Xylenes, Total	1330-20-7	ND	2.0	ug/l	---	66	2.0	ug/l	---	ND	2.0	ug/l	---
GC/MS SVOC														
OSW-8260CSIM														
	1,2,3-Trichloropropane	96-18-4	ND	0.030	ug/l	---	ND	0.030	ug/l	---	ND	0.030	ug/l	---
	1,2-Dibromo-3-Chloropropane	96-12-8	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---
	Ethylene Dibromide	106-93-4	ND	0.020	ug/l	---	ND	0.020	ug/l	---	ND	0.020	ug/l	---